EUREX



Eurex Clearing C7

Release Notes - update

Release: 8.0

Eurex Clearing C7 8.0. – Release Notes - update	08.10.2021

© Furex Frankfurt AG 2021

Deutsche Börse AG ("DBAG"), Clearstream Banking AG ("Clearstream"), Eurex Frankfurt AG ("Eurex"), Eurex Clearing AG ("Eurex Clearing"), Eurex Securities Transactions Services GmbH ("Eurex STS") and Eurex Repo GmbH ("Eurex Repo") are corporate entities and are registered under German law. Eurex Global Derivatives AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Eurex Frankfurt AG is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland is in the following referred to as the "Eurex Exchange".

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG or its affiliates and subsidiaries or used under authorization by their respective owners, including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchange and their respective subsidiaries, servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex Exchange respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others or who desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing, should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products, before doing so.

Only Eurex derivatives that are CFTC-approved may be traded via direct access in the United States or by United States persons. A complete, up-to-date list of Eurex derivatives that are CFTC-approved is available at: https://www.eurex.com/ex-en/rules-regs/eurex-derivatives-us.

In addition, Eurex representatives and participants may familiarize U.S. Qualified Institutional Buyers (QIBs) and broker-dealers with certain eligible Eurex equity options and equity index options pursuant to the terms of the SEC's July 1, 2013 Class No-Action Relief. A complete, up-to-date list of Eurex options that are eligible under the SEC Class No-Action Relief is available at: https://www.eurex.com/ex-en/rules-regs/eurex-derivatives-us/eurex-options-in-the-us-for-eligible-customers. Lastly, U.S. QIBs and broker-dealers trading on behalf of QIBs may trade certain single-security futures and narrow-based security index futures subject to terms and conditions of the SEC's Exchange Act Release No. 60,194 (June 30, 2009), 74 Fed. Reg. 32,200 (July 7, 2009) and the CFTC's Division of Clearing and Intermediary Oversight Advisory Concerning the Offer and Sale of Foreign Security Futures Products to Customers Located in the United States (June 8, 2010).

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Eurex Strategy WizardSM, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®,,GCPI®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAXNEW® and Xetra® are registered trademarks of DBAG or its affiliates and subsidiaries. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® are registered trademarks of Vienna Stock Exchange AG. IPD® UK Quarterly Indexes are registered trademarks of Investment Property Databank Ltd. IPD and have been licensed for the use by Eurex for derivatives. SLI®, SMI® and SMIM® are registered trademarks of SIX Swiss Exchange AG. The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors. Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed, sold or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto. PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc. Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc. The names of other companies and third party products may be trademarks or service marks of their respective owners.

Eurex Deutschland qualifies as manufacturer of packaged retail and insurance-based investment products (PRIIPs) under Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs Regulation), and provides key information documents (KIDs) covering PRIIPs traded on Eurex Deutschland on its website under the following link: https://www.eurex.com/ex-en/rules-regs/priips-kids.

In addition, according to Art. 14(1) PRIIPs Regulation the person advising on, or selling, a PRIIP shall provide the KID to retail investors free of charge.

Eurex Clearing C7 8.0. – Release Notes - update	08.10.2021

Table of Contents

1	Introduction	5
1.1	Readiness Statement	5
1.2	Related Documents	5
2	Overview C7 Release 8.0	6
2.1	Harmonization of Corporate Action Processing – postponed until further notice	6
2.2	Cash settlement of exercised/assigned OSTK contracts	7
2.2.1	Report Changes	7
2.3	Deliverable Bonds	7
2.4	4-Eyes Processing	7
2.5	TA711 All Active Series	8
2.6	Collateral Security Enhancements	8
2.7	FIXML Broker Migration	8
3	C7 Release 8.0 Documentation	10
4	Reports	11

Eurex Clearing C7 8.0. – Release Notes - update	_	08.10.2021
	_	

List of abbreviations:

C7 Eurex Clearing System

CM Clearing Member

ETD Exchange Traded Derivatives

GUI Graphical User Interface

NextGen Next Generation ETD Contracts

SID SenderCompID SoD Start of Day

T7 Eurex Trading System

DVP Delivery-vs-Payment

FOP Free-of- Payment

OSTK Option on stocks

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

1 Introduction

The document provides an overview of the functionality made available with C7 Release 8.0.

This is an updated version as Eurex Clearing has decided not to implement the new Corporate Action harmonization behavior. For details please refer to "Eurex Clearing Circular 089/21 C7 Release 8.0: Updated scope".

Important

This release is a mandatory release for all Clearing Members, Basic Clearing Members, Disclosed Direct Clients of Eurex Clearing AG and vendors.

1.1 Readiness Statement

According to §10 (3) (ii) of the General Terms and Conditions to the Agreement on Technical Connection to the Clearing Electronic Data Processing (EDP) of Eurex Clearing AG, Clearing Members are obliged to provide Eurex Clearing prior to the first use of the updated service of Eurex Clearing's C7 with a written statement confirming that (a) the updated service of Eurex Clearing's C7 successfully passed internal test procedures, and (b) the participant system and the participant software interact with the updated service of Eurex Clearing's C7 without any errors or interruptions.

Participation in the C7 Release 8.0 simulation and testing phase is optional, but highly recommended especially for report and interface changes.

We kindly ask clearing members to submit their readiness statements by Friday 12 November 2021.

1.2 Related Documents

All documents which will be updated in connection with the introduction of C7 Release 8.0 will be made available for download on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases

Details on the publication dates can be found in the "Eurex Clearing Member Communication Calendar" also available Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System documentation > Overview & Functionality

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

2 Overview C7 Release 8.0

Eurex Clearing is planning to launch C7 Release 8.0 on 22 November 2021.

Eurex Clearing provides a dedicated release simulation environment to give participants the opportunity to perform comprehensive testing of their applications, independent from the C7 production environment. The simulation period for C7 Release 8.0 started on 20 September 2021.

Frozen zones:

Simulation: 17.09. – 21.09.2021Production: 18.11. – 23.11.2021

C7 Release 8.0 covers the following functional changes:

- Harmonization of Corporate Action Processing-postponed until further notice
- Cash settlement of exercised/assigned OSTK contracts
- Deliverable Bonds maintenance
- 4 Eyes Processing
- Collateral Security Enhancements
- FIXML Broker Migration

2.1 Harmonization of Corporate Action Processing – postponed until further notice

Eurex Clearing has decided not to launch the new Corporate Action harmonization behavior by which the adjustment of the trading unit will result in a lot size rounded to the nearest whole share and a respective premium adjustment processed at the point of the corporate action.

Until further notice, Eurex Clearing will continue with the current behavior whereby an adjustment of the trading unit can result in a lot size with fractions (up to 4 decimals). Consequently, the cash settlement of fractional trading units is still triggered by exercises and assignments (as today).

However, the resulting cash adjustment will be processed directly by C7 starting with C7 Release 8.0. Hereby, the value date for this type of cash adjustments will change from T+2 to T+1 and data will be included in the Report CD710 "Daily Cash Account CM" (see ch. 2.2).

Please note that the Report Reference Manual and modification notes documentation will not be updated as the functional changes will be implemented at a later stage.

The report listed below will be modified:

Report ID	Report Description
CA752	Capital Adjustment Positions Overview (<i>layout</i> + <i>content</i>)

Further details on RPTCA752 can be found in the in the documents "Eurex Clearing XML Reports - Reference Manual v.8.0" and "Eurex Clearing XML Reports - Modification Notes v.8.0" planned for publication in June 2021 and available for download on Eurex Clearing website www.eurex.com/ec-en/under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System Documentation > Reports

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

2.2 Cash settlement of exercised/assigned OSTK contracts

With regards to the settlement of pure cash transactions resulting from exercise/assignment of OSTK contracts, that are currently processed via the CCP system, the following processing will apply:

Following C7 SCS launch on 27 September, DVP and FOP settlement instructions resulting from exercise/assignments (except for CREST settlements) started to be processed via C7 SCS.

With the introduction of C7 Release 8.0, cash settlements resulting from exercise/assignment of OSTK contracts (e.g. cash settled flexible contracts or settlement of fractions) will be processed by C7. Cash transaction types 294 CASH SETTLEMENT PAID and 296 CASH SETTLEMENT RCV will be generated and processed with a value date T+1.

Payment details will be visible in report "CD710 Daily Cash Account CM".

2.2.1 Report Changes

The reports listed below will be modified (only content changes) starting mid of October 2021 in simulation:

Report ID	Report Description
CB702	Cash Settled Contracts Overview
CE770	Exercise and Assign Overview
CD710	Daily Cash Account CM

2.3 Deliverable Bonds

C7 will fully replace Eurex Classic for all functions related to deliverable bonds.

The functionality for members remain unchanged, only a report change in RPTCE038 Deliverable Bonds is foreseen.

Report RPTCE038 - Deliverable Bonds Report

The text version of the RPTCE038 Deliverable Bonds Report will be decommissioned. Only the xml version and csv format of the report will be generated and provided.

Further details can be found in the in the documents "Eurex Clearing XML Reports - Reference Manual v.8.0" and "Eurex Clearing XML Reports - Modification Notes v.8.0" planned for publication in June 2021 and available for download on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System Documentation > Reports

2.4 4-Eyes Processing

Four-Eyes Processing for Automatic Close Out and Zero Cost Quantity Maintenance

Maintenance of Automatic Close Out and Zero Cost Quantity (ZCQ) attributes supports optional Four-Eyes processing. To achieve that privilege *B003MOD Automatic Processing Rules - Close Out Modify* can be set to entitlement levels 1 and 2 from C7 Release 8.0 onwards.

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

Further details can be found in the in the documents "C7 User Entitlement Guide v.8.0" planned for publication in May 2021 and available for download on Eurex Clearing website www.eurex.com/ec-en/under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System Documentation > Overview & Functionality

2.5 TA711 All Active Series

In order to enhance the data quality in the newly introduced report All Active Series Report TA711 some fields are deleted with C7 Release 8.0.

Further details can be found in the in the documents "Eurex Clearing XML Reports - Reference Manual v.8.0" and "Eurex Clearing XML Reports - Modification Notes v.8.0" planned for publication in June 2021 and available for download on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System Documentation > Reports

2.6 Collateral Security Enhancements

Collateral reports are affected by the removal of obsolete fields and smaller enhancements, providing additional security information like:

- a) Country Code (instead AWV Code)
- b) Additional parameters (pool/inflation factor) for a transparent representation of the collateral value calculation

The reports listed below will be modified:

Report ID	Report Description
CD031	Daily Collateral Valuation
CD037	Claim Amount Based Collaterals
CI720	Intraday Collateral Transaction Report
CI731	Intraday Collateral Position Report

Further details can be found in the in the documents "Eurex Clearing XML Reports - Reference Manual v.8.0" and "Eurex Clearing XML Reports - Modification Notes v.8.0" planned for publication in June 2021 and available for download on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System Documentation > Reports

2.7 FIXML Broker Migration

Eurex Clearing FIXML broker implementation will move from qpid C++ to qpid Broker-J.

Clearing Members and ISVs using the interface should test their applications during the simulation period and upgrade the AMQP libraries used in their software to the latest available versions.

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

The move is planned for 20 November 2021 in production. In simulation the move was already performed on 16 April 2021.

As the Java Broker behaves slightly different, participants are asked to check their applications behavior in terms of the following points:

The new FIXML Java broker allows to define flow control only on queues, whereas the exchange only supports a discard or reject policy for un-routable messages. This means, that if the request queue is full the message will be rejected and the sender will receive an error message. This behavior of request mechanism on FIXML broker differs from how the member (requestor) is notified nowadays when a request queue is full.

The new FIXML Java broker strictly requires a unique <u>client ID</u>. It is not possible to establish two connections with the same client Id. Members are asked to use JMS and to specify their client ID. The client ID, if used, must be unique across all the connections of the broker (FIXML/FpML/Margin Calculator/Trade Entry). This limit applies per broker. The protocols TLS 1.0 and TLS 1.1 will not be supported any longer because of security concerns

More information about flow control behavior and the client ID usage can be found in the Eurex Clearing Messaging Interfaces - Connectivity B: AMQP Programming Guide V.2.1 and Eurex Clearing Messaging Interfaces - Connectivity E: AMQP Setup & Internals V.2.2 available on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System documentation > Interfaces

In order to support this functionality, it is strongly recommended for members to participate in the following focus days planned in simulation:

- August (CW33) 2021 "Load test"¹
- 02.09.2021 "Re-send test"
- 16.09.2021 "Fail over test".

The broker failover to backup host will be performed on FIXML Interface in the simulation environment. During this test clients will experience broker outage which can last for several minutes. Clients should ensure that their applications can recognize the interrupted connection and can automatically reconnect once the broker is again available. To detect a connection failure, client applications are advised to specify 'idle-timeout' which will enable a 'heart-beat' mechanism on the established connection. This way, if a connection is lost, both client and the broker can detect it and act accordingly.

More information on failover and recovery or loss of connection can be found in the C7 - Eurex Clearing FIXML Interface Specification - Volume 1, chapter 7 and in Eurex Clearing Messaging Interfaces - Connectivity B: AMQP Programming Guide V.2.1, chapter 7.2 both on Eurex Clearing website www.eurex.com/ec-en/ under the following path:

Support > Initiatives & Releases > C7 Releases > C7 Release 8.0 > System documentation > Interfaces

¹ Details will be provided via implementation news in advance

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

3 C7 Release 8.0 Documentation

The below listed member documents are available for C7. Updates are provided for every release if applicable. The Eurex Clearing Member Communication Calendar states the publication dates for the documentation package throughout the current year. Please refer to the table below for information on updated member documentation for **C7 Release 8.0.**

Member Document	Functional change in Rel. 8.0	Valid for Simulation as of	Valid for Production as of	Published
C7 Release Notes 8.0				01.06.2021
C7 Release Notes 8.0 - update				08.10. 2021
C7 User Entitlement Guide	4 Eyes Processing	20.09.2021	22.11.2021	01.06.2021
Eurex Clearing XML Reports - Reference Manual	CA processing ² , Deliverable Bond, Collateral Security Enhancements	20.09.2021	22.11.2021	28.06.2021
Eurex Clearing XML Reports – Modification Notes	CA processing ³ , Deliverable Bond, Collateral Security Enhancements	20.09.2021	22.11.2021	28.06.2021
Eurex Clearing XML Reports – XML Schema Files	CA processing ⁴ , Deliverable Bond, Collateral Security Enhancements	20.09.2021	22.11.2021	28.06.2021
C7 Collateral Management Functional Reference Guide	Collateral Security Enhancements	30.08.2021	22.11.2021	28.06.2021
C7 Clearing GUI – User Manual	Collateral Security Enhancements	30.08.2021	22.11.2021	16.08.2021
C7 Derivatives Clearing Functional Reference	n/a⁵			
C7 Reference Data Functional Guide	n/a			
C7 - Eurex Clearing FIXML Interface Specifications	n/a			
C7 - Eurex Clearing FIXML Interface - Schema Files	n/a			

^{2 - 4} All changes remain valid

 $^{^{\}rm 5}\,{\rm n/a}$ indicates that no update to the document is foreseen for this release

Eurex Clearing C7 8.0 – Release Notes - update	08.10.2021

4 Reports

The table below gives an overview of the reports impacted by the introduction of new functionality/enhancement for C7 Release 8.0:

Please note: In all XML schema files targetNamespace is updated according to the new Eurex Clearing Website address. The Namespace in all the XSDs changes as of October 2021.

All changes due to CA Processing remain valid.

*Functionaliy postponed, but changes remain valid

Functionality	Report	Availability Date
Collateral Security	CD031 Daily Collateral Valuation	Simulation: 20.09.2021
Enhancements		Production: 22.11.2021
Collateral Security	CD037 Claim Amount Based	Simulation: 20.09.2021
Enhancements	Collaterals	Production: 22.11.2021
Collateral Security	Cl720 Intraday Collateral	Simulation: 20.09.2021
Enhancements	Transaction Report	Production: 22.11.2021
Collateral Security	CI731 Intraday Collateral Position	Simulation: 20.09.2021
Enhancements	Report	Production: 22.11.2021
CA Processing	CA752 Capital Adjustment Positions Overview*	Simulation: 20.09.2021
		Production: 22.11.2021
CAT TOCC33IIIg	CB702 Cash Settled Contracts	Simulation: mid of Oct.2021
	Overview	Production: 22.11.2021
CA Processing CD710 Dail	CD710 Daily Cash Amount CM	Simulation: mid of Oct.2021
		Production: 22.11.2021
CA Processing	CE770 Exercise And Assign Overview	Simulation: mid of Oct.2021
		Production: 22.11.2021
Deliverable Bonds	CE038 Deliverable Bonds	Simulation: 20.09.2021
		Production: 22.11.2021
C/ Nelease 0.0	TA711 All Active/Inactive Series	Simulation: 11.10.2021
	Report	Production: 22.11.2021