

CCP Release 12.0 / T2S wave 4 Member Simulation Guide

- Public -

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1 Introduction

With the introduction of T2S wave 4, the affected services provided by Eurex Clearing will be adapted to conform to the requirements of T2S, the new European securities settlement engine of the Eurosystem. Eurex Clearing will adjust its processes and products settled to ensure continued services for all affected clients in the new T2S environment. In addition, Eurex Clearing will adjust its systems and processes to include changes prioritized by customers based on new functionality offered by T2S.

Simulation parameters for Lending CCP Service are out of scope for this document.

The CCP release 12.0 concentrates on extending the existing Eurex Clearing CCP Service and the integration of additional functionality in preparation of T2S wave 4.

This document provides key dates for activities necessary for successful participation in simulation, as well as all necessary simulation related details (timeline, simulation events, scope, member preparation, processing, etc.). The times referred to in this document are CET (Central European Time).

This document is structured as follows:

Chapter 2 identifies the target group for simulation and gives an overview about simulation objectives, scope, timeline, as well as approach and processing in member simulation of CCP release 12.0.

Chapter 3 provides information about necessary technical and functional preparations that need to be considered by participating members. Possible tasks concerning member data setup will also be listed in this chapter.

Chapter 4 provides the link to the Simulation Calendar on Eurex Clearings website and the daily schedule of the CCP Simulation and interfaced systems during online and batch days.

Chapter 5 describes the available reporting in simulation, distribution channels per reports and shows changes like updated, new and decommissioned reports.

Chapter 6 provides additional information about related documentation, support hotlines, abbreviations used in this document and graphical overviews over Clearstream Banking Frankfurt (CBF) connection times and a general overview over the events during the simulation period.

Please note: Eurex Clearing has provided an attachment (Attachment CCP 12.0 Member Simulation Guide) to this document.

For Eurex Members: Eurex Clearing plans to support the participation of Eurex only Members in the Eurex Clearing fraction Handling focus days planned for November 2016. Also testing of T2S settlement of equities out of Exercise & Assignments will be supported. The necessary information about ISINs, timings and other requirements will be published at a later date.

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2 Simulation Approach

The following chapters will provide an overview for the CCP release 12.0 Member Simulation and clarify objective, scope, timeline, approach and processing of the Member Simulation. In addition information about the simulation and tests with participating external entities during the simulation phase will be described.

2.1 Simulation objectives

The purpose of the simulation is to provide an opportunity for Members to become familiar with the changes and enhancements to CCP functionality and to test business procedures in preparation for the launch of T2S wave 4 / CCP release 12.0.

Active participation in the simulation is strongly recommended. Early and frequent participation of all Clearing Members facilitates the identification and solution of potential issues with respect to software, infrastructure, business or system operations before production launch.

2.2 Target Group

This document serves as a guide for all Clearing Members participating in the simulation as well as all users of the system. Participation of all Clearing Members and Settlement Institutions in the simulation is strongly encouraged.

The following internal departments of participating organizations should be involved:

- Clearing, Settlement and other relevant middle-/ back-office functions
- IT Infrastructure and Environment Operations
- Network Operations (WAN and LAN)
- Internal Organization and Process Management
- Risk Management

2.3 Simulation Timeline

The CCP release 12.0 member simulation to test T2S related changes is scheduled to start on 08.08.2016 and will end on 03.02.2017.

Date	Event
01.07.2016 - 10.07.2016	Migration Weekend Dress Rehearsal #1 (MWDR) + Preparation phase (simulation closed)
11.07.2016 - 07.08.2016	Internal tests and bilateral test with CBF
08.08.2016 - 04.09.2016	CCP release 12.0 Member simulation (12.0)
05.09.2016 - 04.10.2016	ECAG T2S migration test + Preparation phase (simulation partly closed)

The table below provides an overview¹ of CCP release 12.0 key events:

¹ For a graphical overview, please refer to page 7 of this document.

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Date	Event
23.09.2016 - 27.09.2016	Trade entry window for Members during ECAG T2S migration test (11.0)
04.10.2016 - 13.11.2016	CCP release 12.0 Member simulation (12.0)
25.10.2016 - 27.10.2016	CBF aligned focus days (GC Pooling #1)
01.11.2016 - 03.11.2016	CBF aligned focus days (GC Pooling #2)
14.11.2016 - 01.12.2016	CCP release 12.0 Member simulation (12.0, CBF simulated)
14.11.2016 - 01.12.2016	Eurex Clearing focus days (Fraction handling)
02.12.2016 - 18.12.2016	MWDR #3 + Preparation phase (simulation closed)
14.12.2016 – 15.12.2016	Trade entry window for Members during MWDR #3 (11.0)
19.12.2016 - 01.01.2017	CCP release 12.0 Member simulation (12.0, CBF simulated)
02.01.2017 - 08.01.2017	CCP release 12.0 Member simulation (12.0)
09.01.2017 – 20.01.2017	Business Day Testing in simulation (12.0)
23.01.2017 - 03.02.2017	CCP release 12.0 Member simulation (12.0)
06.02.2017	CCP release 12.0 Production launch

The following table provides an overview of environments and their availability during the CCP release 12.0 simulation:

Environment	Availability	Exceptions
Xetra simulation environment	Entire Simulation period	No
F7 / C7 simulation environment	Entire Simulation period	No
T7 simulation environment	Multiple durations	Closed on 16.09 22.09.2016
CBF simulation environment	Multiple durations	See page 8

It is recommended that all members adhere to the published timetables for simulation execution and production start. This will contribute to a smooth and effective simulation period and a successful production launch for all market participants. Please ensure that this document is communicated as soon as possible to your project teams and to line organizations, where applicable. Before the start of simulation, all parties involved should be aware of their tasks and the existing dependencies with other participants.

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2.3.1 Overview Simulation Timeline

CCP 12.0 /		Jun			Jul					Au	ıg				Se	эр			Oct					No	vc			C	Dec		Jan				
T2S wave 4	Date	27	4	11	1	8	25	1	8	15	5 23	2 2	9	5	12	19	26	3	10	17	7 2	24 3	1	7	14	21	28	5	12	19	26	2	9	16	23
Simulation Close	01 Jul - 07 Jul 2016		:																	СС	CP	Simu	latio	on c	lose	ed									
1st MWDR (mandatory)	08/09 Jul 2016																			СС	CP	Simu	latio	on r	estri	cteo	d (e.	g. C	BF :	settle	men	it sin	nulat	ed)	
CCP Clean-up	11 - 23 Jul 2016																			T2	s١	V4 S	imu	latio	on (c	com	plete	e T2	S sc	ope	can I	be te	stec	I)	
Internal / Bilateral Testing (NO TESTING for Members)	25 Jul - 07 Aug 2016																			Mi	gra	tion	We	eke	nd E	Dres	s Re	hea	rsal	/ Mi	gratio	on te	ests		
ECAG T2S Member Simulation	08 Aug - 04 Sep 2016												Ę.	сс	P 1	2.0																			
Simulation Close	06 - 18 Sep 2016																																		
CCP Member Simulation (contains migration test entry window)	19 - 28 Sep 2016																(l CCF	۲1 ^י	.0															
ECAG T2S migration test	28 - 30 Sep 2016																																		
Simulation Close	29 Sep - 03 Oct 2016																	}																	
ECAG T2S Member Simulation*	04 Oct - 13 Nov 2016																						1		СС	P 1	2.0								
CCP Member Simulation (CBF settlement simulated)	14 Nov - 01 Dec 2016																											с	СР	12.0					
Simulation Close	02 - 12 Dec 2016																																		
CCP Member Simulation (contains migration test entry window)	13 - 16 Dec 2016																													С	CP 1	1 11.0			
3rd MWDR (mandatory)	17/18 Dec 2016																																		
CCP Member Simulation (CBF settlement simulated)	19 Dec - 08 Jan 2017																											С	CP [·]	12.0		1			
ECAG T2S Member Simulation	02 Jan - 08 Jan 2017																												сс	P 12	.0				
Business Day Testing	09 - 20 Jan 2017																													СС	CP 1	2.0			

* Due to a software update, CBF settlement will be simulated between the 18th and 19th of October

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2.3.2 Overview CBF connected to Eurex Clearing CCP 12.0 Simulation

											2016	5														2017	,				
		Aug	gust			Septe	mber				Octobe	ər			Nove	mber			Dece	mber		January						February			
	8	15	22	29	1	8	15	22	1	8	15	22	29	1	8	15	22	1	8	15	22	1	8	15	22	29	1	8	15	22	
ECAG Member												 	-										-		-	-		-			
Simulation												08.08	8.2016	- 03.0	02.201	7															
	08	8.08 - 0	04.09.2	2016				29	.09 - 1	7.10.	2016	20	0.10 -	11.11.	2016			1	7.12 -	21.12	2.2016	0	4.12.2	2016 -	02.02	.2017					
CBF connected																															
						05.09	- 28.0	9.2010	6	18.1	10 - 19	.10.20	16			12.11	- 16.1	2.201	6		22.	12 - 0 [.]	1.01.2	017							
CBF simulated																															



CBF simulation environment connected

ECAG simulation environment open

ECAG Simulation environment closed

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2.4 Simulation Phases

The CCP member simulation for CCP release 12.0 is strongly influenced by the introduction of T2S wave 4. Eurex Clearing as market participant needs to adapt to the new T2S environment provided by the European Central Bank (ECB) and the participating CSDs.

For the Member Simulation of CCP Release 12.0 the Eurex Clearing relevant migrating CSD CBF and the ECB as operator of the T2S system itself are involved.

As such, CCP Release 12.0 simulation consists of the following events²:

- I. Internal / Bilateral test Eurex Clearing / CBF
- **II.** Migration Weekend Dress Rehearsal 1 to 3
- III. Member simulation for T2S wave 4
- IV. Focus days
- V. Business Day Testing

2.4.1 Frozen zones in CCP 12.0 simulation

The execution of the Migration Weekend Dress Rehearsals (MWDRs) 1 to 3 necessitates frozen zones for changes to static data of Members in CCP 12.0 simulation. The frozen zones for simulation in which changes to Members static data need to be avoided are as follows:

MWDR	Start	End						
MWDR #1	27.0630.06.2016 and 11.07.2016							
ECAG T2S migration test	29.0802.09.2016 and 03.10.2016							
MWDR #3	28.1104.12.2016 and	19.12.2016						

2.4.2 Internal / Bilateral test Eurex Clearing / CBF (11.07 - 07.08.2016)

During the bilateral test Member Simulation will stay open but will be unsupported. As internal tests are executed during this timeframe, tests started by Members in CCP Simulation might be disrupted or produce unexpected results. It is strongly recommended to avoid testing in CCP simulation before 08.08.2016.

² Please refer to chapter 2.3 for an overview of the Simulation timeline.

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2.4.3 Migration Weekend Dress Rehearsals (MWDR)

To prevent negative impacts for Members on the migration weekend and to prepare for T2S wave 4 (CCP 12.0) introduction on 06.02.2017, Eurex Clearing plans to participate in all MWDRs scheduled by the ECB. Three Migration Weekend Dress Rehearsals (MWDRs) are planned, two of which are open for Member participation on Eurex Clearing side (MWDR #2³ and #3). These MWDRs will be executed on weekends and entail the whole aligned migration procedure for the installation of T2S wave 4-ready software for CCP and CBF systems including necessary rollbacks to previous versions and other preparations. MWDRs require preparation time and will impact the Member Simulation. For the MWDRs historical reports are not available.

2.4.3.1 Migration Weekend Dress Rehearsal #1 (08.07 - 09.07.2016)

For the first MWDR between 08.07 and 09.07.2016, the simulation environment will be closed from 01.07.2016 until 10.07.2016. Between 01.07.2016 and 07.07.2016 the new CCP release 12.0 software will be installed and the conversion of master data will be executed.

Due to the fact that the delivery instruction message layout will change from CCP release 10.0 to 12.0 the delivery instructions generated before the MWDR have to be recreated in the new format. The new delivery instructions will be reported after the MWDR on 11.07.2016 (First day of CCP release 12.0 in simulation).

During the first MWDR active Member participation is not possible.

Please note: A subset of Xetra trades from production (calendar day 27.05.2016 for settlement next business day after MWDR) will be loaded into the CCP for the MWDR. These trades will be visible on the applicable CCP and CBF reporting.

Reporting: Please note that the IDs of the deliveries reported before start of the MWDR and the IDs reported in the CE265 "Pending Deliveries before NTP" on Monday will not match. The CE270 "Settled Delivery" can be expected on Monday morning in the first reporting run after the MWDR. These reports will be made available via the applicable distribution channels.

Important: Due to technical reasons, report selection changes made during MWDR and MWDR preparations will not be saved. Members are advised to check their report selection in simulation after each MWDR.

The relevant phases during the MWDR are listed in the following table:

Date	Event	Simulation status
01.07.2016 - 07.07.2016	Preparation and installation	Simulation closed
08.07.2016 - 09.07.2016	MWDR#1	Simulation closed
11.07.2016	Reports available (12.0)	Simulation open (unsupported)

³ As the MWDR#2 will not be executed in alignment with CBF, this document will refer to it as ECAG T2S migration test.

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2.4.3.2 ECAG T2S migration test (formerly MWDR #2) (28.09 - 30.09.2016)⁴

As the CCP release 12.0 software is in simulation at this time, a rollback to the earlier CCP release 10.0 needs to be executed to prepare for another migration test. The simulation environment will be closed between 06.09.2016 and 18.09.2016 and again between 29.09 and 03.10.2016. Between 06.09.2016 and 18.09.2016 preparations and the installation of CCP 11.0 software will be executed to create a stable database version for the third MWDR in December and to test the migration weekend under more production like conditions (installation from 11.0 to 12.0). Between 23.09 and 28.09.2016 Member simulation with CCP release 11.0 software will be open. On 23.09 until 27.09.2016 trade entry⁵ by Members for the ECAG T2S migration test will be possible. Please see "Active Member participation" below for details. Installation and conversion from CCP release 11.0 to 12.0 will start on 28.09.2016 after which the ECAG T2S migration test will be executed between 28.09 and 30.09.2016.

Please note: Trades sent to the CCP in simulation via the trading locations which were pending before the rollback, will be deleted by Eurex Clearing during rollback (06.09.2016). In addition, due to the fact that the delivery instruction message layout will change from CCP release 11.0 to 12.0 the delivery instructions generated on Wednesday 28.09.2016 (CCP release 11.0) before the ECAG T2S migration test have to be converted/ recreated in the new format. The new delivery instructions will be reported after the ECAG T2S migration test.

Active Member participation: For the ECAG T2S migration test, active member participation is possible in CCP simulation. Trades can be entered for T+2 settlement on 23.09.2016 until 27.09.2016 before CCP cut-off in simulation (14:30) and will be sent to CBF for settlement. Please be advised that the software version in simulation during the trade entry window will be CCP release 11.0. Entered trades between 23.09 and 27.09.2016 by Members will be part of the ECAG T2S migration test to recreate the instructions in the CCP release 12.0 format. Please make sure that the appropriate liquidity on the Dedicated Cash Account(s) connected to the used T2S securities accounts for settlement in simulation is available for settlement date 04 October 2016.

Please note: A subset of Xetra trades from production (calendar day 27.05.2016 for settlement next business day after the ECAG T2S migration test) will be loaded into the CCP for the ECAG T2S migration test. These trades will be visible on the applicable CCP and CBF reporting.

Reporting: On Wednesday 28.09.2016 the CE265 "Pending Delivery before NTP" will be made available to all members in simulation. As the delivery instructions reported before start of the ECAG T2S migration test in the CE265 "Pending Delivery before NTP" can change during the conversion. Eurex Clearing will provide a special migration report for reconciliation containing CE265 like data⁶ on Friday 30.09.2016.

⁴ Please be advised that the second MWDR planned by the ECB is optional. Eurex Clearing will execute the second MWDR and offers Members to participate as well. CBF does not plan any customer participation in the second, optional MWDR on their part. As the MWDR#2 will not be executed in alignment with CBF, this document will refer to it as ECAG T2S migration test.

⁵ The T7 trading system will not be available during the first trade entry day on the 23.09.2016.

⁶ Please be advised that due to the same settlement day the name of the report would be identical. To make a comparison possible, "MIGR" will be added to the name of the CE265-like report provided after the ECAG T2S migration test.

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The CE270 "Settled Delivery" can be expected on Tuesday morning (04.10.2016) in the first reporting run after the ECAG T2S migration test. These reports will be made available via the applicable distribution channels.

Important: Due to technical reasons, report selection changes made during ECAG T2S migration test and its preparations will not be saved. Members are advised to check their report selection in simulation after each ECAG T2S migration test/ MWDR.

Date	Event	Simulation status
06.09.2016 - 18.09.2016	Preparation and installation -> 11.0	Simulation closed
19.09.2016 - 23.09.2016	Member simulation CCP 11.0	Simulation open
23.09.2016	Trade loading (11.0)	Simulation open
23.09.2016 - 27.09.2016	Trade entry window (11.0) ⁷	Simulation open
28.09.2016	Last batch before migration test	Simulation open
29.09.2016 - 03.10.2016	ECAG T2S migration test	Simulation closed
04.10.2016	Reports available (12.0)	Simulation open

The relevant phases during the ECAG T2S migration test are listed in the following table:

2.4.3.3 Migration Weekend Dress Rehearsal #3 (16.12 - 18.12.2016)

The last MWDR is the most production like test of the migration weekend in February 2017. To prepare for this MWDR the simulation environment is closed between 02.12 and 12.12.2016. During this time, the rollback from CCP release 12.0 in simulation to CCP release 11.0 will be executed. This rollback will use the database of CCP release 11.0 saved from the second MWDR which will be adapted to the date that can be used for MWDR #3 date. On 14.12 and 15.12.2016 the simulation environment will be open for trade entry by members.

Please note: Trades sent to the CCP in simulation via the trading locations which were pending before the rollback, will be deleted by Eurex Clearing during rollback (02.12.2016). In addition, due to the fact that the delivery instruction message layout will change from CCP release 11.0 to 12.0, the delivery instructions generated on the Friday before the MWDR have to be converted/ recreated in the new format. The new delivery instructions will be reported after the MWDR.

Active member participation: For the third MWDR, active member participation is possible. Trades can be entered for T+2 settlement in the MWDR on 14.12 and 15.12.2016 before CCP cut-off in simulation (14:30) and will be sent to CBF for settlement.

Please be advised that the software version in simulation during the trade entry window will be CCP release 11.0. Entered trades between 14.12 and 15.12.2016 by Members will be part of the trades used for the MWDR to create new instructions in the CCP release 12.0 format. Please make sure that the appropriate liquidity on the Dedicated Cash Account connected to the used T2S securities accounts for settlement in simulation is provided during the MWDR weekend.

⁷ Please be advised that during these trade days, the CCP release 10.0 simulation day is valid.

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Please note: A subset of Xetra trades from production⁸ will be loaded into the CCP for the MWDR. These trades will be visible on the applicable CCP and CBF reporting.

Reporting: On Friday 16.12.2016 the CE265 "Pending Delivery before NTP" will be made available to all members in simulation. As the delivery instructions reported before start of the MWDR in the CE265 "Pending Delivery before NTP" can change during the conversion, Eurex Clearing will provide on Sunday 18.12.2016 the special migration report for reconciliation containing CE265 like data⁹. The CE270 "Settled Delivery" can be expected on Monday morning in the first reporting run after the MWDR. These reports will be made available via the applicable distribution channels.

Important: Due to technical reasons, report selection changes made during MWDR and MWDR preparations will not be saved. Members are advised to check their report selection in simulation after each MWDR.

Date	Event	Simulation status
02.12.2016 - 09.12.2016	Preparation and Rollback to 11.0	Simulation closed
13.12.2016 - 15.12.2016	Trade loading (11.0)	Simulation open
14.12.2016 - 15.12.2016	Trade entry window (11.0) ¹⁰	Simulation open
16.12.2016 - 18.12.2016	MWDR #3	Simulation closed
19.12.2016	Reports available (12.0)	Simulation open

The relevant phases during the MWDR are listed in the following table:

2.4.4 Member simulation for CCP release 12.0 for T2S wave 4 (08.08.2016 - 03.02.2017)

The CCP release 12.0 simulation is an open or "free-style" simulation. As such, simulation participants can define and perform their own internal simulation scenarios as appropriate for the new / changed functionality.

CCP Members may participate at any time, provided the technical connection and logon test has been successfully processed. Functional and technical support will be staged during the helpdesk opening hours each simulation working day. Please refer to chapter 6.2 "Support" for further details.

High volume or performance tests during the CCP release 12.0 simulation are not planned. Please refrain from performing high volume tests in simulation without the consent of Eurex Clearing.

2.4.5 Focus days

For CCP release 12.0 simulation Eurex Clearing will partially support focus days planned by CBF and will offer further corporate action focus days to show fraction handling which was introduced with CCP 10.0 / T2S wave 2.

⁸ For the third MWDR a new trade snapshot in alignment with the ECB and CBF will be used. Details will be published in due time.

⁹ Please be advised that due to the same settlement day the name of the report would be identical. To make a comparison possible, "MIGR" will be added to the name of the CE265-like report provided after the ECAG T2S migration test.

¹⁰ Please be advised that during these trade days, the CCP release 10.0 simulation day is valid.

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2.4.5.1 Aligned CBF focus days

CBF plans to offer focus days for corporate actions and GC Pooling. Eurex Clearing will support these focus days for the duration where CCP simulation is open for Members. For these focus days the whole value chain starting with trading and ending with settlement at T2S is actively connected.

2.4.5.1.1 Aligned CBF Corporate Actions

CBF will execute a series of corporate actions, including bonus shares, income events and pari passu. As the ratio for bonus share and pari passu events is 1:1, no fractions can occur. For these corporate action events, corporate action reporting will be provided as in production because Eurex Clearing has either kept the underlying processing of these corporate actions without fractions stable or does not offer processing for these corporate actions (e.g. pari passu). Necessary requirements for participation are access to applicable trading locations, sufficient holdings in cash (DCA / T2)¹¹ and securities on the respective accounts at CBF.

Pending late trades on record day will be processed by the CCP system and will be visible on the applicable CCP corporate action report.

For details concerning the above mentioned corporate actions and possible requirements from CBFs side, please refer to the "CBF Customer Simulation for T2S Wave 4 - Simulation Guide, Detailed Version".

2.4.5.1.2 Aligned GC Pooling focus days

As the securities settlement of GC Pooling will switch from CBF to T2S, focus days are planned to offer members the opportunity to participate and make themselves familiar with the changes. While the securities will settle on T2S, the cash leg will still be settled on T2 RTGS-accounts.

To participate in the GC Pooling focus days to their full extend and variety, Members need to fulfil the following requirements:

Area	Requirement	Contact
Trading	Access to F7 trading GUI in simulation	Eurex Repo
Trading	Authorized to trade the ECB basket in EUR and/ or USD	Eurex Repo
Cash EURO	Sufficient funds on T2 RTGS-account(s) in simulation	Bundesbank
Collateral	Sufficient securities as collateral on collateral account(s) at CBF ¹²	CBF

For the GC Pooling focus days the following basket is available:

Basket	Currency	ISIN
ECB basket	EUR / USD	DE000A0AE077

¹¹ Non-euro cash holdings are not necessary because foreign currency bookings will be simulated in CBF simulation.

¹² Securities collateral holdings need to be present on the Clearing Members 550 sub account at CBF.

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The following parameters are recommended to provide all members with sufficient liquidity from Eurex Clearing side and to experience the complete lifecycle including reporting of GC Pooling trades by CBF:

Parameter	Recommended type
Trade type	Overnight
Trade size	3 Mio EUR / USD

There are two GC Pooling windows in CCP 12.0 simulation. If the trade type "overnight" is used the following scenarios for completing the full trade lifecycle are possible (green days are the **trade days** on which the front leg will settle and blue days are days on which the term leg will settle):

GC Pooling #1	Day 1 (25.10.2016)	Day 2 (26.10.2016)	Day 3 (27.10.2016)
Trade 1	Trade 1 Front leg / Settlement Term leg / Settle	Term leg / Settlement	
Trade 2		Front leg / Settlement	Term leg / Settlement
GC Pooling #2	Day 1 (01.11.2016)	Day 2 (02.11.2016) Day 3 (03.11.2016	
Trade 1	Front leg / Settlement	Term leg / Settlement	

Please note: Outside of these focus days, Eurex Clearing will use simulators to settle GC Pooling trades internally.

For a manual how to enter buy and sell trades using the F7 trading GUI, please refer to the Eurex Repo Quick Reference Guide attainable via the following link:

http://www.eurexrepo.com/blob/1838780/2704a2d8376ac0d6b07ef5e1c8704932/data/f7_quick_refer ence_guide.pdf

2.4.5.2 Eurex Clearing corporate action focus days (Fraction handling)

As requested by Members, Eurex Clearing will offer corporate action focus days comparable to those offered in simulation for CCP 10.0. For these focus days equities in non-collective safe custody at Clearstream will be used to simulate fraction handling with all effects on Eurex Clearing reporting introduced with T2S wave 2¹³.

The following cases will be offered:

#	Scenario	Ratio	Name	ISIN ¹⁴
---	----------	-------	------	--------------------

¹³ Please be advised that these corporate actions will be executed by Eurex Clearing without CBF participation. Trades entered for these corporate actions will not settle at CBF between 14 November and 01 December 2016 but will instead be settled by simulators.

¹⁴ All three ISINs are part of the instrument group "UKI1". Please make sure that your Xetra trader has access to this instrument group to make a successful participation in the fraction handling focus days possible.

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1	Nominal Change (Split)	7:9	BHP Billiton	GB0000566504
2	Nominal + ISIN Change (Split)	7:9	Pearson	GB0006776081
3	Additional Rights (+ISIN change)	9:10	BAE Systems	GB0002634946

Trade days and record days for each event are planned as follows:

Scenario	Trade input	Trade day	EX day	Record day
1	14.11 - 15.11.2016	15.11.2016	16.11.2016	23.11.2016
2	14.11 - 16.11.2016	16.11.2016	23.11.2016	24.11.2016
3	21.11 - 24.11.2016	24.11.2016	29.11.2016	30.11.2016

For further information on new ISINs, requirements, relevant reports etc. please refer to the "Attachment CCP 12.0 Member Simulation Guide" document.

For Eurex-only Members: Eurex Clearing plans to support the participation of Eurex only Members in the Eurex Clearing fraction handling focus days planned for November 2016. Also testing of T2S settlement of equities out of Exercise & Assignments will be supported. The necessary information about ISINs, timings and other requirements will be published at a later date.

2.4.5.3 Partial Settlement

Clearing members are free to test partial settlement in CCP simulation. Partial settlement is used in case the liquidity of cash or securities is insufficient to execute the trade in full quantity. While the instruction is sent in full quantity to T2S, T2S executes partial settlement if cash or securities on the applicable accounts are not available in sufficient amounts/ quantities. To test partial settlement, preparatory measures are necessary. To simulate lack of cash or lack of holdings, the Clearing Member has to check the holdings and cash accounts at CBF and insert a trade for which not enough cash or quantity is available on the respective cash/securities accounts.

Important: From 08.08 until 02.10.2016 there will be a cash threshold (amount) per delivery that needs to be reached for partial settlement to be possible. Deliveries for equity-style instruments have a threshold of 10.000€. For debt instruments like bonds, the threshold is 100.000€ per delivery. Deliveries that do not reach these thresholds will not be subject to partial settlement. After 02.10.2016¹⁵ partial settlement will be executed on quantity level with the threshold equal to the instruments Minimum Settlement Unit (MSU).

The following examples describe the most common cases of partial settlement including the effects on reporting.

¹⁵ Please note that the CCP simulation environment is not always available during the mentioned period.

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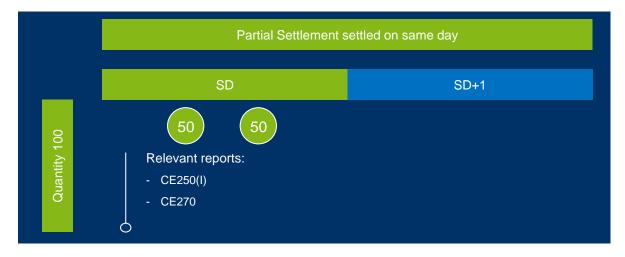
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The first case describes partial settlement on settlement day, with the remaining quantity settling on settlement day as well. In this case, the instruction can be seen on the newly introduced report CE250 for cash deviation bookings as a potential candidate (shown as (I) in the picture) for a cash deviation as well as the report CE270 "Settled Delivery".

Because the trade settles fully on settlement day, no cash deviation booking is necessary. To simulate this scenario the lack of holdings or cash needs to be remedied on the same day before end of settlement in simulation (16:00), to make settlement of the second part of the trade possible.



The second case describes partial settlement on settlement day, while the remaining quantity settles on the next business day (S+1). In this case the instruction will also be visible on the CE250 not only as possible candidate but as an entry for which a correctional cash booking for the deviating cash amount is necessary (shown as (D) in the picture below). A deviating cash amount per partial settlement instruction can happen due to the fact that security prices per trades may differ. T2S only receives the instruction with amount and quantity. The amount of an instruction is the sum of amounts of the underlying trades and thereby is based on an "average" price. If a partial quantity of the instruction is settled and the price for the trade quantity that has settled does not match the "average" price, the difference in price needs to be corrected (cash booking and reporting)¹⁶. The correctional cash booking is shown in report CE250¹⁷.

The partially settled trade is also visible on the CE270 with the settled quantity (and settlement amount = trade price * partially settled quantity), while the remaining quantity is visible on the report CE260 "Pending Delivery".

To simulate this scenario, lack of holdings or lack of cash needs to be remedied for the next business day to make settlement of the second part of the trade possible.

¹⁶ For more details on partial settlement cash deviations, please refer to the "Release Notes CCP 12.0 / T2S wave 4"

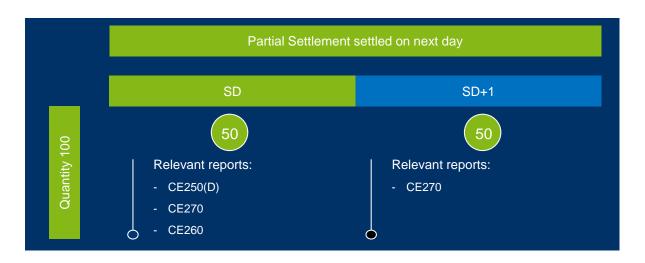
¹⁷ Cash deviations will only occur if net trades are used. Gross trades are sent in a single instruction without a price per trade mixture. Partial settlement executed on a gross trade cannot cause cash deviations.

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Other cases are just variations of case two, stretched over a longer period of time. The reporting and processing will essentially be the same.

2.4.6 Business day testing

This phase is planned shortly before introduction of T2S wave 4. The purpose is to test the new business day and T2S functionalities with the most production-like setup possible. In this phase, the CCP plans to run five batches per week (Monday until Friday) and while the business day in simulation will be adapted to resemble the live T2S business day as closely as possible timings will still differ.

Important: To consider experiences and lessons learned from the adapted business day in CCP 12.0 simulation, the business day in CCP simulation for the business day testing period will be communicated to Members in due time.

2.5 Simulation Scope

The following table shows an overview of the changes that will be introduced with CCP Release 12.0 as well as noticeable impacts in CCP release 12.0 simulation.

Торіс	Changes	Member impact in simulation
Business day	- Adaptation of Eurex Clearings business day to T2S timelines	New business day timeline (see chapter 4 for details)
Delivery	 Introduction of new cut-off times for DvP and FoP instructions and MSIF deadlines 	- See topic "Business day"
Management	- Introduction of intraday aggregation runs (IDA runs)	 IDA runs (equities only): Increased frequency of aggregation and transfer of delivery instructions to T2S via CBF

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Tonio	Changes	Mombor impact in cimulation
Торіс	Changes - Usage of T2S features	Member impact in simulation - Partial settlement and its reporting
		- Gross Trade Identifier visible on
	- Changes in message layout	settlement confirmations for gross trades
	- Changes in message layour	sent by CBF
	- Changes in late delivery handling	-
		- none
	- Optional services: Single delivery	- Both options testable in CCP 12.0
	instruction and deviating DCA	simulation
Cash	- Adaptation of cash runs and their effect on delivery management and limitations due to timing restrictions of external systems and entities	- Partial settlement payment adjustments (reported in CE250) in case of partial settlement
Gross Delivery	- Adaptations to GDM according to	- GDM will be unavailable during IDA runs
Management	the new T2S business day	- New MSIF deadlines
		- Report CE250 is available in simulation
		- The report CE275 will be
	- Batch based reporting will be	decommissioned
Reporting	moved to continuous reporting (CORPT)	- Fraction handling feedback in CA180,
		CD250 and CE270 will include
		fractions/cash compensations out of CA
		processing where applicable

For a more detailed description of the changes introduced for T2S wave 4, please refer to the "**Release Notes CCP 12.0 / T2S wave 4**" document which is available on Eurex Clearings Member Section via the following path:

www.eurexclearing.com > Eurex Clearing Member Section > Technology > CCP Releases > CCP 12.0 / T2S wave 4 > Manuals > Functional Manuals

While CCP release 12.0 will not encompass any changes for the Lending CCP service, the Lending CCP is available for testing. Corporate Actions and Voluntary Corporate Actions for Lending CCP loans during the simulation period are not possible.

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2.6 Processing

2.6.1 Order Entry and Trade Processing

During the normal CCP release 12.0 Member simulation phases Members have to create trades in Xetra (or other connected trading systems like Eurex Bonds, Eurex Exchange and Eurex Repo) by entering orders. Xetra offers an automatic matching for a selected set of instruments. These trades will be transferred to the CCP system in the same way as in production.

The message flow and operational procedures used during simulation testing will be used in production as well. For exceptions please refer to the MWDRs in chapter 2.4.3.

Members will be requested to create / update their organisational procedures and process documents when needed. Clearing Members are responsible for entering trades and respectively the participation of their Non Clearing Members.

2.6.2 Delivery Management

The CCP trade delivery is managed by members using the gross delivery management interface Securities Clearing GUI.

Members either access the system via the CCP application or they send the "MSIF" - Member Settlement Instruction File (MT543 / MT541) via SNA to the CCP host. Additionally, CCP Members have the possibility to send SWIFT messages (MT543 / MT541). Please refer to the "**CCP Release 12.0 Member File Based & SWIFT Interface**" for details.

Corresponding reports from the risk engine and the CCP host will be disseminated during the overnight batch.

2.6.3 Report Output

In general all reports currently available in simulation will be offered (with the exception of the report CE275 which will be decommissioned with the introduction of CCP release 12.0 / T2S wave 4) and provided to the CRE (or additionally via SNA or SWIFT if available).

Detailed information about the report changes for T2S wave 4 is available in the "Description of Reports – Formatted Layout", "Description of Reports – RAW data" and "Member File Based & SWIFT Interface" documents for CCP 12.0.

For details about the availability of reports and their distribution channels please refer to chapter 5 of this document.

With introduction of T2S wave 4, the batch oriented reporting (BRP) of Eurex Clearing will be replaced by the already existing continuous reporting (CORPT). Begin of Day (BoD) and End of Day reporting (EoD) will also be provided in simulation.

As the batch driven netting and settlement runs will be replaced by real time and night time settlement the reporting schedule will also change. New CORPT run times in simulation are as follows:

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Report run	Time	Report run	Time
CORPT 1	09:00	CORPT 4	15:00
CORPT 2	10:30	CORPT 10	18:00
CORPT 3	13:15	CORPT 11	19:30

The CORPT runs 5, 6 and 7 have been deactivated in simulation.

3 Member Preparations

Members are advised to make use of the entire preparation period, in order to ensure successful participation in the CCP simulation.

This chapter describes the simulation preparation tasks to be done by the Clearing Members. The simulation preparation tasks are divided into two sections. Section 3.1 describes technical preparations while section 3.2 describes functional preparations. Chapter 3.3 describes necessary data for Member Setup in CCP 12.0 Simulation.

3.1 Technical Preparations

Kit Installation, VALUES API and Operating System

The MISS platform has been decommissioned in simulation and will not be available in CCP release 12.0 simulation.

Technical Connection – Eurex Clearing

Clearing Members are requested to verify their new or existing connections to the simulation environments of the relevant systems – Eurex Clearing CCP, T7, F7, C7 and Xetra. Members are encouraged to verify the availability of all applications used in the simulation and to verify, that all required users are set up and access is granted to them.

Securities Clearing GUI - Browser requirements

In order to connect successfully to the Securities Clearing GUI and to ensure a smooth service it is recommended to use the following browsers to connect to the GUI:

- For Windows XP and higher IE 8.0 or Firefox 5.0 or higher
- For Linux Firefox 5.0 or higher

3.2 Functional Preparations

3.2.1 Functional Preparations CCP

Clearing Members' functional preparation should include the setup of the back office, staff training as well as the conclusion of arrangements with affiliated Members, if applicable. Back office staff is also responsible for provision of setup data / forms to Eurex Clearing. Clearing Members planning to participate in the simulation should verify their individual setup/clearing relationship and inform Eurex Clearing of any changes that may be required prior to the start of the simulation.

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For participants in the CCP release 12.0 simulation for T2S changes it is strongly recommended that the functional setup is completed prior to **27 June 2016**.

All participants planning to utilize the new functionalities in production should participate in the simulation.

The introduction of the CCP release 12.0 may lead to new and / or altered back office processes. Clearing Members are encouraged to complete the adaptations (e.g. staff training and IT applications updates) prior to the start of the simulation period. This will ensure the seamless integration of the new and enhanced clearing and settlement functionality into the existing back office environment.

Participants are also encouraged to set up an internal issue management process.

Changes to the CCP and the reporting are explained in detail in the **Release Notes CCP 12.0 /T2S** wave 4 and in the CCP 12.0 **Description of Reports – Formatted Layout**, **Description of reports - RAW Data** and **Member File Based & SWIFT Interface** report documents which can be found in the Member Section of Eurex Clearings website (<u>www.eurexclearing.com</u>) via the following path:

www.eurexclearing.com > Eurex Clearing Member Section > Technology > CCP Releases > CCP 12.0 / T2S wave 4 > Manuals > Technical / Functional Manuals

Participants in the CCP Service are encouraged to check and adjust the selection of reports via the Report Selection window available in the CCP system.

Especially clients who like to participate in the focus days are encouraged to check if the reports that reflect the applicable focus day topics are selected in order to be able to analyse the entries caused by events tested on the focus days.

Important: Due to technical reasons report selection changes made during MWDR and MWDR preparations will not be saved. Members are advised to check their report selection in simulation between each MWDR.

3.2.2 Dedicated Cash Accounts

With the introduction of T2S new cash accounts for settlement in central bank money are required. For the availability of dedicated cash accounts (DCAs) in simulation, these accounts need to be applied for at the applicable national bank and aligned with settlement accounts at CBF. In case CBF is connected to CCP simulation, sufficient cash holdings on these DCAs are necessary. Members who like to use the optional DCA service offering of Eurex Clearing need to prepare sufficient funds on these DCAs as well.

3.2.3 Trading Locations

To ensure the effective participation in the CCP simulation 12.0 and the offered focus days it is advised to verify access to the trading locations Xetra ® (XETR, XFRA, XEUB etc.), T7 (Eurex Exchange) and F7 (Eurex Repo, GC Pooling). This includes test accounts, traders and their access to the instruments Members like to use in their test cases or are used in the various focus days.

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3.3 Member Data Setup

New Members wishing to participate in CCP services must be set up prior to simulation start with the roles they have specified on the respective setup forms provided to Eurex Clearing.

Clearing Members, not acting as Trading Participants themselves, must ensure that their simulation activities are fully supported by a connected Trading Participant. If the Clearing Member uses a Settlement Institution appropriate support is required by this third party.

Please consider the frozen zones in CCP simulation described in detail in chapter 2.4.1.

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4 Simulation Availability

Simulation Calendar

The CCP release 12.0 simulation will start from 08.08.2016 for Member testing with full release simulation support. The simulation calendar has also been published on the Eurex Clearing website www.eurexclearing.com under the link: **Technology > Simulation calendar**

Simulation Availability

In general three settlement days a week will be performed. On these days intraday settlement as well as the night time processing will take place. Please consult the CCP Simulation Calendar for details on batch days per week.

On settlement days the simulation systems will close earlier than in production. This is in order to avoid any possible impact on the end-of-day processing operations of the production system. The CCP simulation starts 8:30 and the CCP online end is scheduled for 16:00. The business day structure in simulation is described later in this chapter.

Participating Systems

A simulation cycle (an end-to-end process) begins with the entering of orders into the trading system and finishes with the settlement of the trades/ delivery instructions. From a technical point of view, these processes will incorporate the applications listed below:

System	Short Description		
CCP / Lending CCP ¹⁸	Central Counterparty system (Gross Delivery Management, cash management, settlement netting, report and data dissemination, corporate actions processing) and Lending CCP system		
Risk Engine	Risk Based Margining Calculation (risk position determination, necessary margin requirement calculation, etc.)		
StatistiX	Statistical data warehouse system (Statistical data storage, analysis and report generation)		
Clearstream Banking Frankfurt	Central Security Depository systems (settlement, delivery management, corporate actions processing, collateral management etc.) CBF operated systems will run on simulation environment IMS23		
Xetra	Electronic cash market trading system (order entry, matching, order administration, confirmations, trade enrichment, etc.)		
Т7	Eurex Exchange's T7 (Derivatives trading)		
F7	Trading platform of the Eurex Repo Markets		
C7	CCP for cash and derivatives (Derivatives clearing)		

¹⁸ The Lending CCP is available for testing in CCP 12.0 simulation. During the times where CBF is connected to the CCP 12.0 simulation, Lending CCP loans eligible for CBF will settle. Outside of these times and for other CSDs Lending CCP loans will be settled via simulators.

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CSD Connection

Clearstream Banking Frankfurt (CBF) will be connected to Eurex Clearings simulation environment during definite periods¹⁹. Trades in ISINs²⁰ for which holdings have been prepared by CBF will settle during these times. Please be advised that during these times, sufficient cash for settlement is necessary on T2 and dedicated cash accounts (DCA) in simulation. In simulation phases where CBF is not connected, simulator tools will be used for settlement.

Other CSDs will not be connected to the simulation. Instructions for these CSDs are processed by an internal settlement simulator tool. All instructions will settle.

Daily Schedule

Simulation days will either be settlement days (shown as batch days in the Simulation Calendar) or non-settlement days. In CCP release 12.0 simulation settlement days will occur three times a week. In case of a non-settlement day (and the day before was a settlement day (batch day)) the system and the availability of the CCP Gross Delivery Management (GDM), limited to read-only, starts at 8:30. GDM ends with the MSIF deadline for the respective product on each settlement day. For exact MSIF deadlines please refer to the column ("MSIF deadline NTP") in the table on the next page. Business days correspond to the calendar day on settlement days only.

With the decommissioning of batch driven settlement, intraday aggregation runs (IDA runs) will be introduced to aggregate sell trades and create delivery instructions (buy and sell side) sent for settlement. In CCP Release 12.0 simulation three IDA runs (five in production) will be executed per batch day. IDA runs are only applicable for equities in euro and non-euro in collective safe custody at CBF. T2S eligible bonds will not be aggregated. During the IDA runs, GDM is unavailable.

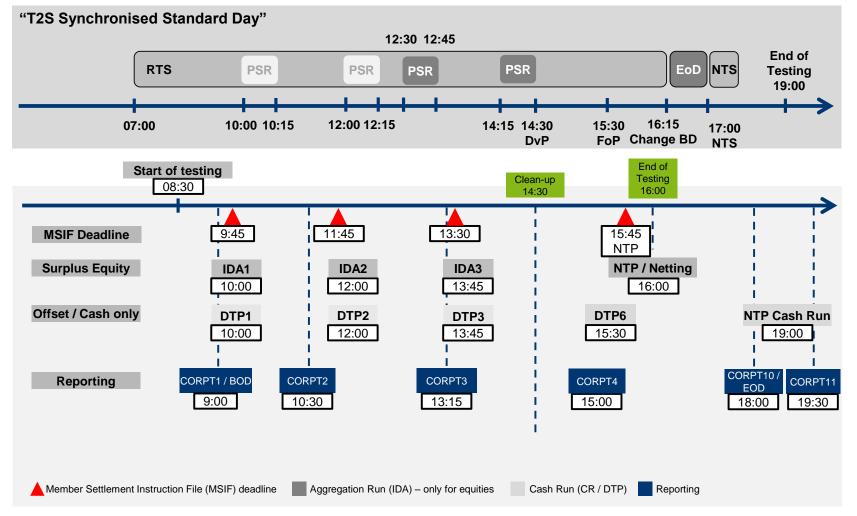
For detailed information about IDA runs and Partial Settlement please refer to the **Release Notes CCP 12.0 / T2S wave 4** which are available in the Eurex Clearing Member Section.

To adapt to the T2S synchronized standard day defined by the ECB, the batch day in CCP 12.0 simulation has changed.

¹⁹ For more detailed information please refer to the overview of the simulation timeline on page 7 of this document.
²⁰ For a list of ISINs that are available in CCP simulation and for which CBF has set up holdings please refer to the "ISIN Attachment CCP 12.0 Member Simulation Guide" document.

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The new CCP business day in simulation for equity-style products in euro in collective safe custody at Clearstream is shown in the following image:



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Due to different settlement timings and processes, some of the deadlines are different between instrument groups. The following tables illustrate the instrument groups and their differences concerning schedule:

Instrument group / Product	Clean-up	MSIF deadline NTP
Equity-style products (euro) in CSC ²¹ at Clearstream	14:30	15:45
Equity-style products (non-euro) in CSC at Clearstream	14:30	16:30
Equity-style products in NCSC ²² at Clearstream	14:30	16:30
Bonds (euro/non-euro)	14:30	15:45
Equity-style products (CHF) issued by SIX SIS	14:00	16:30

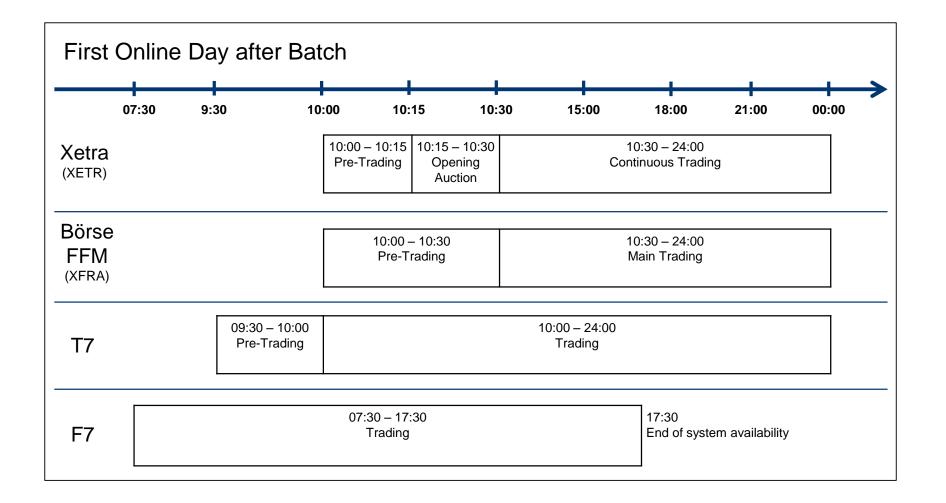
For the following instrument groups / products that are instructed as Immediate Settlement Instruction (ISI) for settlement on the same day, the following timings are valid in simulation:

Instrument group / Product	Cut-off time for same day settlement / Clean-up		
Bonds (euro/non-euro) ISI X-border	11:00		
GC Pooling ISI	15:10		
GC Pooling Select ISI	15:10		

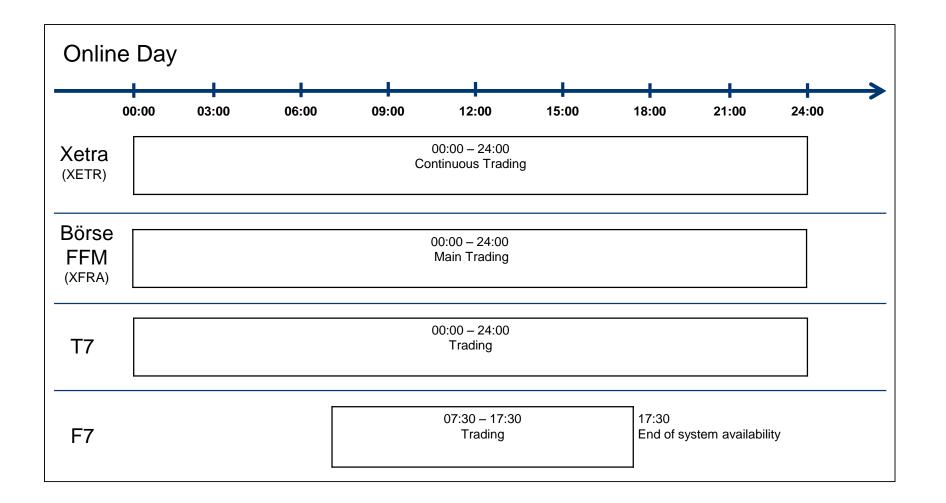
The following pages show the availability of the trading location in simulation during batch day, online day and online day after batch day.

²¹ Collective safe custody
 ²² Non-collective safe custody

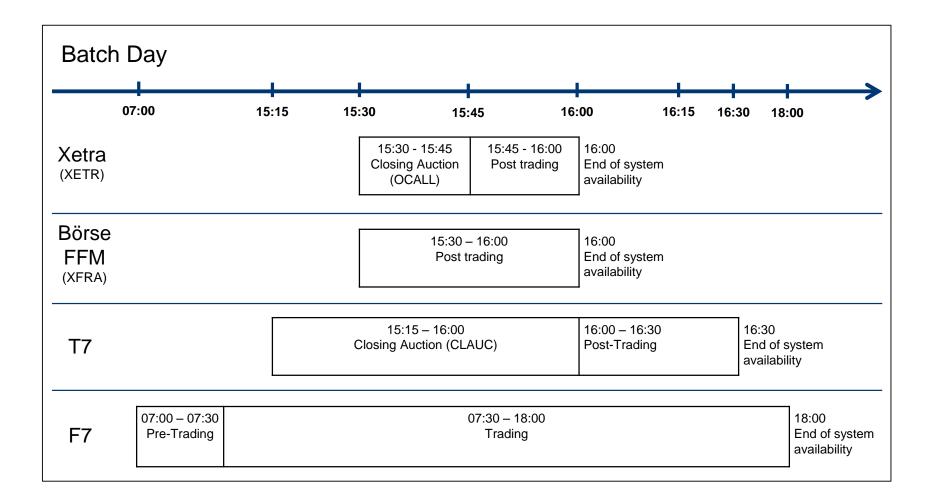
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5 Simulation Reporting

Available CCP Reports

With the introduction of CCP release 12.0, Formatted, RAW, SWIFT and Pipe-Separated reports will be updated. The specific changes to each report are described in detail in the "Description of Reports – RAW", "Description of Reports – Formatted Layout", "Member File Based & SWIFT Interface" and "Release Notes" for CCP release 12.0 in the Member Section of Eurex Clearing website (<u>www.eurexclearing.com</u>).

The following table lists all CCP reports available in the simulation along with the respective reporting channels. Changed reports are marked in yellow, new reports are marked in green and reports that will be decommissioned will be marked in orange.

Report Name	Print Report Format ID-Number	Raw Data Report	Swift Format	Availability
Risk Management				
Current Liquidating Margin	RPTCC011	Available as XML		CRE
Theoretical Values II	RPTCC031	No RAW file		CRE
Theoretical Values III	RPTCC033	No RAW file		CRE
Theoretical Values IV	RPTCC034	No RAW file		CRE
Liquidating Values	RPTCC040	Available as XML		CRE
Additional Margin	RPTCC045	Available as XML		CRE
Daily Margin	RPTCC050	Available as XML		CRE
Daily Margin Offset	RPTCC055	Available as XML		CRE
Daily Margin Summary	RPTCC060	Available as XML		CRE
Security/Cash Risk Position	RPTCC080	Available as XML		CRE
Security/Cash Risk Position	RPTCC080	Available as XML		CRE
Securities Margin Class and Group Information	Not available	FPICMGBP		CRE
Theoretical Values: Equities	Not available	FPICTHEE		CRE
Theoretical Values: Unconditional Subscription Rights	Not available	FPICTHES		CRE

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Report Name	Print Report	Raw Data Report	Swift	Availability
кероп маше	Format ID-Number		Format	Availability
Theoretical Values: Bonds	Not available	FPICTHEB		CRE
Theoretical Values: Coupons	Not available	FPICTHEC		CRE
Corporate Actions				
Compensation Partner (CMs/SI)	RPTCA130/131	RAWCA130/131		CRE
Custody Payment Statement (CMs/ SI)	RPTCA160/161	RAWCA160/161		CRE
Capital Adjustments on Trades (CMs/SI)	RPTCA180/181	RAWCA180/181		CRE
Delivery				
Daily Gross Delivery Management (CMs/ SI)	RPTCB230/231	RAWCB230/231		CRE
Partial Delivery Cash Amount Deviation (CMs / SI)	RPTCE250/251	RAWCE250/251		CRE
Pending Delivery (CMs / SI / NCMs)	RPTCE260/261/262	RAWCE260/261/262	MT536	SNA, CRE, SWIFT
Pending Deliveries before NTP (CMs / SI / NCMs)	RPTCE265/266/267	RAWCE265/266/267	MT536	SNA, CRE, SWIFT
Settled Delivery (CMs / SI / NCMs)	RPTCE270/271/272	RAW CE270/271/272	MT536	SNA, CRE, SWIFT
Settled Delivery – Offset (CMs/ SI/ NCMs)	RPTCE275/276/277	RAW CE275/276/277	MT536	Decommissioned
Pending Delivery Instructions (CM/SI)	RPTCE280/281	RAWCE280/281	MT536	SNA, CRE, SWIFT
Eurex Deliveries (CMs / SI / NCMs)	Not available	RAWCE290/291/292	MT512 ²³	SNA, CRE

²³ MT512 is a proprietary Eurex Clearing format which is not part of the Message type list supported by SWIFT.

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Report Name	Print Report Format ID-Number	Raw Data Report	Swift Format	Availability
Net Position Confirmation (CMs / SI / NCMs)	Not available	RAWCE295/296/297	MT512	SNA, CRE
Net Clearing Report (CMs/ SI/ NCMs)	Not available	RAWCE395/396/397	MT518	SNA, CRE, SWIFT
Cash Reports				
Cash Obligations (CMs/ SI)	RPTCD150/151	RAWCD150/151		CRE
Settled Cash Transactions (CMs/ SI)	RTPCD250/251	RAWCD250/251		CRE
Cash Forecast for STD/NTP (CMs/ SI)	RPTCD270/271			CRE
Trade Report				
Repo Contracts	RPTTC750/751/752	RAWTC750/751/752		CRE
Repo Fixings (CMs / SI / NCMs)	RPTTC755/756/757	RAWTC755/756/757	MT536	CRE

New report
Decommissioned report

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6 Appendices

6.1 Related Documentation

All Member documents providing information regarding the new and existing functionality can be found in the Member Section of Eurex website at <u>www.eurexclearing.com</u>.

6.2 Support

Eurex Clearing Support

Eurex Clearing will provide support for Member preparations during the simulation of CCP release 12.0. The following teams may be contacted concerning any questions related to the preparation and participation in the CCP release 12.0 simulation.

Client Services Clearing

Telephone:	+49 (69) 21 1 – 1 17 00		
Fax:	+49 (69) 21 1 – 1 17 01		
Availability:	09:00 - 18:00 CET (or	n exchange trading days)	
E-Mail:	memberservices@eurexclearing.com		
Websites: <u>www.eurexcha</u>	<u>www.xetra.de,</u> nge.com	www.eurexclearing.com,	www.deutsche-boerse.com,

Eurex Clearing Functional Helpdesk CCP

Telephone:	+49 (69) 21 1 – 1 19 40
Fax:	+49 (69) 21 1 – 1 43 34
Availability:	08:00 - 18:00 CET (on exchange trading days)
E-Mail:	ccp@eurexclearing.com
Websites:	www.xetra.de, www.eurexclearing.com, www.deutsche-boerse.com

Functional Helpdesk Xetra Frankfurt

Telephone:	+49 (69) 211 – 1 14 00
Fax:	+49 (69) 211 – 1 14 01
Availability:	08:00 - 18:00 CET (on exchange trading days)
E-Mail:	xetrahelpdesk@deutsche-boerse.com

Functional Helpdesk Eurex Repo

Telephone:	+41 (0)43 430 72 20
Fax:	+41 (0)43 430 72 75
Availability:	07:00 - 18:00 CET (on exchange trading days)
E-Mail:	funchelp@eurexrepo.com

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Clearstream T2S Customer Readiness Team

 Telephone:
 +49 (69) 211 – 1 82 78

 Fax:
 +49 (69) 211 – 60 80 60

 Availability:
 08:00 - 16:00 CET (on exchange trading days)

 E-Mail:
 <u>T2S-Support@clearstream.com</u>

Clearstream Banking Customer Service

Telephone:	+49 (69) 211 – 1 11 77
Fax:	+49 (69) 211 – 1 37 01
Availability:	08:00 - 18:00 CET (on exchange trading days)
E-Mail:	csdomestic@clearstream.com
CASCADE and	KADI requests can be addressed to the Clear

CASCADE and KADI requests can be addressed to the Clearstream Banking Customer Service Domestic.

6.3 Instrument Data

A complete list of the available instruments can be found in the Member Section of the Xetra website: xetra.com > Member Section > Cash Market Member Section > Cash Market Resources > Simulation. Instruments available in the CCP are designated as "**CCP eligible**".

Important: Please be advised that CBF has limited the number of ISINs for which holdings will be set up on the T2S securities accounts in simulation. For each ISIN CBF will set up holdings of 100.000.000 in quantity per CBF main account (XXXX 000). The list of supported ISINs for T2S settlement for which CBF has established holdings are described in the "ISIN Attachment CCP 12.0 Member Simulation Guide" document which will be made available in due time.

Trades in other T2S eligible ISINs will not settle at T2S due to a lack of holdings on the applicable settlement accounts.

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6.4 Abbreviations

Abbreviation	Description
BoD	Begin of Day
BRP	Batch driven reporting
СА	Corporate Action
CBF	Clearstream Banking Frankfurt
ССР	Central Counterparty
CET	Central European Time
СМ	Clearing Member
CORPT	Continuous reporting
CRE	Common Report Engine
CSC	Collective Safe Custody
CSD	Central Securities Depository
DCA	Dedicated Cash Account
DvP	Delivery versus Payment
ECAG	Eurex Clearing AG
ECB	European Central Bank
EoD	End of Day
ESES	Euroclear Settlement of Euronext-zone Securities
FoP	Free of Payment
GDM	Gross Delivery Management
GUI	Graphical User Interface
IDA	Intraday Aggregation
ISI	Immediate Settlement Instruction
ISIN	International Securities Identification Number
SNA	Systems Network Architecture
SI	Settlement Institution
MSIF	Member Settlement Instruction File

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Abbreviation	Description
MSU	Minimum Settlement Unit
MWDR	Migration Weekend Dress Rehearsal
NCSC	Non-Collective Safe Custody
NTP	Night Time Processing
RTGS	Real-time Gross Settlement
SWIFT	Society for Worldwide Interbank Financial Telecommunication
T2	TARGET2
T2S	TARGET2 Securities
ТМ	Trading Member
Xetra	Exchange Electronic Trading System