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ECMS User Testing Execution Testing Conditions

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New changes introduced in this version included in bold and italics

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1.1 Background and objective

The Market Infrastructure Board (MIB) has approved to apply a staggered testing approach per functionality for ECMS User Testing (UT) phase. The ECMS functionalities are categorised into 12 different functionalities (See Annex 1). The counterparties (CPTYs)/CSDs/TPAs as part of the ECMS testing actors will be regularly informed via this testing conditions document of the functionalities that are open for their testing in the UT phase in ECMS Pre-Production environment.

The objective of this document is to provide an overview of the ECMS functionalities that are open for counterparty testing and of the software limitations that are impacting ECMS UT for the functionality opened for CPTY/CSD/TPA testing following the staggered approach. With this communication, all the CPTYs/CSDs/TPAs involved in UT are informed of the testing conditions i) enabling fine tuning of local test plan efforts and ii) avoiding defects/bugs on the known/documented limitations.

This overview is updated on a fortnightly basis, and all involved ECMS testing actors are informed of any update on the planning of the testable scope.

1.2 Current functional testing scope

The following functional domains are open to CPTYs/CSDs/TPAs testing in the ECMS Pre-Production environment:

- Reference data
- (De)mobilisation/cancellation of marketable assets
- Global credit and collateral position
- Cash as collateral U2A and A2A cash mobilisation and demobilisation
- Credit Claims U2A and A2A, registration, update mobilisation/demobilisation of domestic
 Credit Claims
- Automatic mobilisation and demobilisation of cash collateral
- Monetary Policy Operations (Request Marginal lending, Automatic Marginal Lending, Open Market Operations (OMO))
- Corporate Actions for CA events INTR, REDM, PRED, PCAL, MCAL
- Pool Positions and projections (colr.016 Pool Position reports)
- Statements and Reports (Generation and reception of statements of holdings, statement of transactions pending transactions (semt.002, semt.017 and semt.018)

The detailed user testing conditions are outlined as of section 2.

1.3 Structure of the document

The document starts with presenting in section 2.1 the complementary information to the principles and planning aspects stated in <u>User Testing Terms of Reference for Pre-Production</u>, in line with ECMS current testing conditions.

Then, the document presents in section 2.2 the overview of testing conditions in two categories:

- Functional domains open for CPTY/CSDs/TPAs testing (including the functional elements to be opened in upcoming 2 weeks period) in ECMS UT phase including the limitations that might impact the testing of these functionalities.
- Functionalities that the Eurosystem has not fully tested and hence are not open for CPTY/CSDs/TPAs testing in the ECMS UT phase.

2. User Testing Conditions (cut-off: 21.05.2024)

2.1 Complementary information to UT ToR

This section includes some complementary information to the principles and planning aspects stated in User Testing Terms of Reference

2.1.1 ECMS project - General terms and principles

As explained in User Testing Terms of Reference, the following principles are applicable for User Testing phase.

- The standard opening and support hours of the Pre-Prod environment are Monday to Thursday, from 09:00 to 17:30 CET (i.e., following the ECMS standard day schedule), except for Fridays, when the opening hour is from 09:00 to 14:30 CET (i.e., following the ECMS release day schedule). Outside of this period, it might be possible to access the screens but the accessibility and the testability of the software for current Business Day test scenarios will be limited as the change of BD happens at this cut-off for ECMS/T2S and CLM on the Pre-Prod environment are not guaranteed.
- During UT, the Pre-Prod environment will be connected to the testing environments of other TARGET services.

Service	ECMS UT in Pre-Prod
T2S	Three slots: 1. 3 July 2023 to 20 September 2023 2. 27 November 2023 to 10 April 2024 3. 24 June 2024 onwards
CLM	Three slots: 1. 3 July 2023 to 20 September 2023 2. 27 November 2023 to 10 April 2024 3. 24 June 2024 onwards

 During the period, when ECMS is connected to TARGET2-Securities (T2S) and the Central Liquidity Management (CLM) the operational day schedules are planned to be aligned. The detailed ECMS process/events for the different operational day schedules are provided in the Annex 3 of this document.

2.1.2 Connectivity testing phase

As explained in the <u>UT Terms of Reference for PreProd</u>, the objective of the connectivity testing phase is to ensure full end-to-end connectivity to the ECMS via ESMIG, i.e. to ensure that all communication between relevant ECMS testing actors and the ECMS is working properly for A2A (correct inbound and outbound messages transmission), when applicable, and U2A (access to the ECMS GUI).

The actors that were up to now not connected in U2A or A2A shall complete the connectivity tests as early as possible, in order to create their users for their testing activities. The connectivity tests to the test environment can be performed from Monday to Fridays within the standard opening hours (see 2.1.1).

2.1.3 System Reference Data

For the Provision of Reference Data from Eurosystem services for ECMS testing, the CPTYs/CSDs/TPAs shall take note of the following status.

The Eligible Assets (EAs) as of 30/06/2023 were loaded in the pre-production environment and the prices are assigned for these Eligible Assets for the start of testing. The EA list in ECMS is updated with delta information on a daily basis and the full update of EAs will be done at the end of Month. As from 04/03/2024, the prices are also updated on a daily basis with the production prices data from previous Business day (i.e. D-1). Nevertheless, it is not guaranteed it will be 100% aligned with Production and not all eligible marketable assets are registered in the T2S testing environment. Hence, if a CTPY need a specific asset for their testing purpose they should liaise with their National Service Desk, which should also ensure the assets are registered in T2S (with support of their CSDs) and also the availability of prices to these assets in ECMS.

Additionally, the exchange rates will also be maintained in the PreProd environment as per the testing needs by the NCBs for testing purpose.

The RIAD entity data, CSDB ratings data are being updated on a daily basis in the test environment. RIAD close links are yet to provided in the test environment due to pending open issues in integration of close links data. The interconnection between Tender Operations Platform (TOP) and ECMS has been tested in the user testing test environment by NCBs and this can also be tested CPTYs as part of the upcoming Open Market Operations (OMO) testing in July 2024 (see section 2.2.6)

Please refer to the sections below for the details on the functionalities that can be tested by CPTYs/CSDs/TPAs.

2.1.4 Community Testing Phase (CTP)

As from 11/04/2024, the functional testing started with T2S/CLM simulators as the interconnection with T2S/CLM is disabled as planned (ECMS User Testing Terms of Reference for PreProduction) and shall continue until 03/05/2024. Please refer to the annex for further details on the functioning of T2S/CLM simulator.

- From 08/05/2024, the Migration test 9 starts. The migration Test 9 is composed of 3 parts:
 - 1. Pre-migration rehearsal (PMR) from 08/05/2024 to 14/06/2024,
 - 2. Preparation Week Dress Rehearsal (PWDR) from 17/06/2024 to 27/06/2024 and
 - Migration Weekend Dress Rehearsals (MWDR) from 28/06/2024 to 30/06/2024 (note: the dress-rehearsal will have as much as possible conditions close to PROD, hence the weekend activities are to be performed on the weekend and overnight if required per the schedule).
- To prepare the environment for Test 9, a clean-up of the environment will be performed **such** that all reference and transactional data are deleted.
- Hence, the ECMS Operator and NCBs will reconstitute the data from the connectivity (i.e., parties, administrator user, and A2A users of CSD/TPA) based on current ECMS UTEST data.
 Therefore, NCBs may request CSD/TPA/CTPYs to check if connectivity is maintained.
- CTPY activities are planned from 22/05/2024 to 27/05/2024, and from 03/06/2024 to 10/06/2024, always starts upon green light from your NCBs. The CPTY activities are: (1) Set-up of CTPY A2A user [from 22/05 to 27/05], (2) Set-up of CTPY users and their access rights, (3) Checking that the CTPY registration form data is properly set-up in ECMS.
- CSD/TPA do not have to re-do the T2S Set-up for ECMS as this is not cleaned up.
- CSD/TPA activities are only for the PWDR and MWDR schedule to start on 17/06/2024 (detailed timeline to be provided later).

- CSD/TPA activities are: (1) Reception by TPA of the MA data sent by ECMS, (2) Support by TPA of the TPA positions migration, (3) Support by CSD of the CA events migration
- During Test 9 PMR the business day of the environment is kept every day equal to 14/06/2024. The business day will change on daily basis as from 17/06/2024 onwards.
- After the successful completion of migration test 9, from 01/07/2024 the NCBs/CPTYs/CSDs/TPA shall restart their functional testing with T2S/CLM interconnection.

2.2 Category 1 - Functionalities Open for CPTY/CSD/TPA testing.

This category lists the functional (sub)domains open to CPTY testing (see Annex 1 for the full list), and the respective limitations.

Based on the outcome of the testing performed by the National Central Banks, the Eurosystem decided to open the following functional blocks its relevant <u>fundamental test cases</u> for CPTYs/CSDs/TPAs functional testing in Pre-Production environment.

Reference data

- Create/Update/Delete U2A and A2A Counterparty users and the corresponding access rights setup.
- Reconciliation via GUI of asset accounts and pools configuration previously set-up done by the NCBs.

Marketable assets

- o Domestic Mobilisation and Demobilisation of Marketable Assets
- Cross Border Mobilisation and Demobilisation of Marketable Assets
- Cancellation of Mobilisation and Demobilisation of Marketable Assets

Please note, functional sub-domains that are not yet open for testing in Marketable Assets are listed in section 2.3.

- Global credit and collateral position
 - Update of Maximum Credit Line value and Credit lines
 - Margin call
 - Credit freezing
 - Global credit position management
 - o Update of credit and collateral position due to the change of business date
- Cash as collateral U2A and A2A cash mobilisation and demobilisation
 - U2A and A2A mobilisation of cash collateral
 - U2A and A2A demobilisation of cash collateral
 - o automatic mobilisation and demobilisation of cash collateral

Credit Claims

o CC registration (U2A and A2A)

- CC update (U2A and A2A)
- Rating Registration and Rating Update instructions to counterparties relying on IRB rating.
- Mobilisation of domestic (A)CC with obligors being IRB-rated.
- Mobilisation of domestic (A)CC with obligors being ECAI rated.
- Mobilisation of domestic (A)CC with obligors being ICAS rated.
- o (A)CC mobilisation of Public Sector Entity
- CCOAU
- o demobilisation of domestic (A)CC with obligors being IRB-rated.
- o demobilisation of domestic (A)CC with obligors being ECAI rated.
- o demobilisation of domestic (A)CC with obligors being ICAS rated.
- o (A)CC demobilisation of Public Sector Entity

Please note, functional sub-domains that are not yet open for testing in credit claims are listed in section 2.3.

- Monetary Policy Operations
 - o Request Marginal lending.
 - Automatic Marginal Lending
 - \circ Liquidity Absorbing Operations (LAO) \rightarrow Fixed Term Deposit (fixed/standard rate).
 - Liquidity Providing Operations (LPO) → Main Refinancing Operations (MRO fixed rate),
 Long-Term Refinancing Operations (LTRO) (indexed on MRO rates), US Dollar operations.

The last OMO testing campaign took place from 19/03/2024 to 03/04/2024. The next OMO testing campaign will be organised as from July 2024.

- Corporate Actions
 - Corporate Action Announcement/CA confirmation, CA instruction, CA movement for all event types (i.e., MAND/VOLU/CHOS)
- Pool Positions and projections (colr.016 Pool Position reports)
- Statements and Reports
 - Generation and reception of statements of holdings (semt.002)
 - Generation and reception of statements of transactions and pending transactions (semt.017 and semt.018)

The CPTYs are advised to wait for the Green Light of their respective NCBs before starting the testing of above mentioned functional sub-domains and shall take note of open software defects in Annex 2 which will introduce certain limitations to the testing of these functionalities.

2.3 Category 2 - functionalities not open for CPTY testing

This category includes the functionalities which are not fully tested by the Eurosystem and hence not open for CTPY/CSDs/TPAs testing. The table below lists the functional domains/sub-domains that are not opened for CTPY/CSDs/TPAs testing. The timeline for opening the next set of functionalities for CPTY/CSDs/TPAs testing will be communicated in the next ECMS testing conditions document.

ECMS Functional domain	Timeline to open for testing in Pre-Prod
Marketable Assets	01/07/2024 - Relocation of Marketable Assets
Corporate Actions	01/07/2024 - CA reversal/CA withholding tax management
Credit Claims	01/07/2024 for cross border CC testing
Triparty Agents (TPA)	01/07/2024
Provision of Reference Data to	01/07/2024 - Eligible Assets, Prices and close links to T2S
T2S and Triparty (with Auto	01/07/2024 - Eligible Assets, Prices and close links to TPA
collateralisation testing)	
Billing	To be planned
Non-Repudiation of Origin (NRO)	The timeline for the activation of NRO solution in testing environment is
	currently being tested by NCBs and the plan to activate NRO for CPTYs
	testing is to be confirmed. The testing can start upon greenlight from your
	NCBs. All the CPTYs are advised to install the Ascertia Go-Sign Desktop
	(GSD), if not completed yet ¹ .

3. Annexes

Annex 1 – ECMS functionalities

The following table list the different ECMS functionalities which are delivered in a staggered approach for testing.

The latest version of the Qualified Configurations has been included in the ESMIG UDFS for R2023.JUN. As part of the rollout of new version 6.9.0.20, the new client is also available for download in the certification environment (link below) starting from Tuesday,14/11/2023. https://www.ecb.europa.eu/paym/target/consolidation/profuse/shared/pdf/ESMIG_UDFS_R2023.JUN_clean_20230303.en.pdf

ECMS Functional	Open for	Functional Sub-domains ²		
Domains	CPTYs/CSDs/TPAs			
Reference Data	Yes	Access Rights and User Creation, Reconciliation via GUI of asset accounts and pools configuration previously set-up done by the NCBs.		
Marketable Assets (MA)	Partially.	Domestic mobilisation/demobilisation of MA, Cross-Border Mobilisation/demobilisation of MA (CCBM), cancellation of mobilisation/demobilisation of MA, Relocation of collateral.		
Global credit and collateral position	Yes	Update of Maximum Credit Line value and Credit lines Update of Credit freezing, Global credit position management, Margin call, Update of credit and collateral position due to the change of business date.		
Cash as collateral	Yes.	Cash Collateral mobilisation/ Cash Collateral demobilisation (U2A/A2A/Automatic)		
Corporate Actions	Partially	Corporate Action Announcement/CA confirmation, CA instruction, CA movement/CA reversal/CA withholding tax management		
Credit Claims	Partially	U2A domestic CC registration/CC update U2A Domestic Credit Claims Mobilisation/CC rating/ CC Demobilisation U2A Cross border CC registration/Credit Claims Mobilisation/CC update/CC rating/ CC Demobilisation A2A domestic CC registration/Credit Claims Mobilisation/CC update/CC rating/ CC Demobilisation A2A Cross border CC registration/Credit Claims Mobilisation/CC update/CC rating/ CC Demobilisation		
Tri Party Agents (TPA)	No	Cash proceed of a triparty corporate action/reports/decrease a TP transaction amount/removal of asset/ the reception of the files from TPA		
Monetary Policy Operations	Yes	Request marginal lending/Automatic marginal lending/Interaction with TOP/Liquidity Absorbing Operations (LAO)/Liquidity Providing Operations (LPO)/Management of Interest		
Pool Positions and projection	Yes	Providing information to counterparties on pool positions		
Provision of Reference Data to T2S and Triparty	No	Provision of Reference Data to Support Auto-collateralisation/ for TPA - Closelinks/Eligible Assets/prices		
Statement and Reporting	Yes	Generation and reception of statements of holdings, transactions, and pending transactions (semt.002, semt.017 and semt.018) for ECMS internal asset accounts.		

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The text that are <u>underlined</u> in the table are the functional elements that are open for CPTYs/CSDs/TPAs testing within the specific ECMS functionality.

ECMS Functional Domains	Open for CPTYs/CSDs/TPAs	Functional Sub-domains ²
Billing	No	Interaction with CSDs and TPAs

Annex 2 - Open Defects

Reference Data - 25Medium and 1 Low Priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
129746	Medium	Instruction ID containing double quote " is accepted .CC file failed with error traced. This may need change of the CC file schema to align with Target services pattern	08/06/2024
128858	Medium	[APPR]] ICAS - ICAS record processed no although rating created when optional additional ID are not indicated	08/06/2024
128614	Medium	[CBT] data scope history screen (counterparty id information is missing)	25/05/2024
126385	Low	The alert should be received only one time for user with different roles related to the same functionality.	10/05/2024

Marketable Assets -1- High1 Medium and 0 Low priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
128024	Medium	[MIG TEST8]On the screens Client_Market MA SETLED Position when download data have one column duplicated	25/05/2024

Credit Claims - 2 High; 17 Medium and 3 Low priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
130228	Medium	Four-Eye on Pool movement creation is activated- CC file failed	22/06/2024
130210	Medium	CCU remains in status Waiting Global collateral position update	22/06/2024
130208	Medium	Wrong mob status when obligor does not existe	22/06/2024
129640	Medium	When NCB instruct via A2A using NCB A2A user on behalf of a counterparty Cpty asset account not checked	08/06/2024
129643	Medium	Obligor Rating Screen list screen case multiple selection : remove not needed actions (Edit -Delete)	08/06/2024
128910	Medium	Alerts not raised if CCMOB is waiting for NCB validation	08/06/2024
128905	Medium	address details for debtor	25/05/2024
128813	Medium	Rating update of a rating with validity end date in the past should be allowed.	25/05/2024
128695	Medium	Stop per Instruction Type not working when mobilisation of a credit Claim	25/05/2024
128690	Medium	CCU wrongly rejected when received with CCOAU and same isntruction ID	24/05/2024
127782	Medium	Problem with the threshold amount when the CCR is in USD	24/05/2024
125598	High	Full dissemination] batch job does not recognize missing rating	24/05/2024
125467	Medium	CCBM Eligibility tracker status Management when CCBM (Waiting CCB Validation, Waiting NCB Validation)	24/05/2024
125158	Medium	[CBT]Evolution of CC position	24/05/2024
123027	Low	[EAT2] Create/Display Creditor – Creditor appears active although its End Validity Date is in the past	08/06/2024

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
128554	Low	2 CCR included in the same file ==> duplication check not performed	08/06/2024
127782	Medium	Problem with the threshold amount when the CCR is in USD	24/05/2024
127737	Low	Outstanding Amount Update: While entering the correct (our) credit claim reference, the field is not filled but is automatically emptied. With a magnifying glass it is difficult to find the suitable credit claim reference, but when you find and select it, this field is filled with the Eurosystem Credit Claim ID.	24/05/2024
127351	High	The 3NTP was stuck at 03:00, the job for DDF was successfully executed but the one for RIAD was Condition not passed: The expression: { RIADManager.checkRIADFileReceived(null, null) } evaluated to: false	08/06/2024
125841	Medium	CC file - reconciliation reference to be sent to Instructing party - Head>BizMsgldr or Document>GrpHdr> Msgld>).	08/06/2024
125467	Medium	CC - CCBM Eligibility tracker status Management when CCBM (Waiting CCB Validation, Waiting NCB Validation)	24/05/2024
123951	Medium	CC file - When A2A files or U2A files are treated in parallel.	08/06/2024

Global Credit and Collateral Positions – 2 High and 7 medium priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
130141	Medium	Missing Instruction Types in screen Edit / Validate - Draft Instruction	22/06/2024
129319	Medium	There is an issue in SoH (Collateral Valuation) in case one CTPY has the same ISIN in two different CSDs	08/06/2024
128933	Medium	Collateral excess not calculated when Credit line configuration creation and the NCB MaCL < SCL	25/05/2024

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
117572	High	The EMC-files with the revaluation of the EMC were queued and not processed.	24/05/2024
128441	Medium	update of pool reference wrongly removes NCB MaCL at the level of the pool.	24/05/2024
128412	Medium	Credit line created at the same time when the previous one is being updated to settled is blocked in Waiting Previous Modification.	08/06/2024
128410	Medium	Credit Line cancelled during the day by a credit line settled after cut off - The Status of underlining event linked to the cancelled credit line is not updated to Settled when the new Credit line is Settled	24/05/2024
125187	High	GCCP - random issue - Send MCL - Receiver = MegaCustody	08/06/2024

Cash as Collateral - No open issues

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date

Monetary Policy Operations - AML/MLOR/OMO - 2 High, 7 Medium Priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
129755	Medium	OMO/FTD bidAllotedBusinessValue should accept negative value	08/06/2024
128652	Medium	Migration cycle 8 – Discrepancy between OMO Instruction screen and pool overview - USD OMO	24/05/2024
120932	Medium	Interests seen twice, strange maturity date, missing principal amounts, no early repayments seen	24/05/2024
120614	High	OMO - rounding issue after full early repayment	08/06/2024

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
105835	High	Report with duplicated records TOP test campaign	22/06/2024
128283	Medium	TLTROIII interest rate calculation – incorrect	08/ 06/2024
126381	Medium	Accrued Interest Amount in Currency on the screen Display Calculated Interest not ok	08/06/2024
125844	Medium	OMO - MPO Expected Payment - Too much data requested - review of the screen	22/06/2024
126083	Medium	Calculation of daily interest Task stuck in failed not blocking due to PALM error	22/06/2024

Corporate Actions – 1 High and 8 Medium priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
129939	Medium	seev.031 messages missing in HCB tenant	22/06/2024
129827	Medium	CA WRTH incoming seev.031 REPL were not correctly processed	22/06/2024
128734	Medium	Message subscription - Seev.035 not received by the counterparty	08/06/2024
129472	Medium	pacs.002 received is Impact failed with error description: "PALM-02016: One of the following fields balanceType, beneficiary, positionDate with same value already exists. Please change it."	08/06/2024
129269	Medium	When NOAC option has not Response deadline datetime the default instructions has to be generated at the highest Response deadline datetime	08/06/2024
129202	Medium	Client Payment must be created with the amount received in the seev.036/camt.054	08/06/2024

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
126693	Medium	Issue reported When the payment date is reached, the corporate events should have processing status equal to "Waiting payment" before payments are received, but instead the events processing status is "Executed".	08/06/2024

Pool Position and Projections – 1 High and 1 Medium priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
127045	High	AML with maturity date 27/03 not closed after the NTP1 job Mature AML. Expected: The AML instruction should be matured after the execution of the job mature AML.	24/05/2024
126369	Medium	Pool Projection Result failed]	24/05/2024

Statements and reports – 2 Medium priority defects

Problem ID	Priority	Business Description/Summary/testing limitation	Target delivery date
124405	Medium	Missing statistical balance payments report	24/05/2024
129581	Medium	Relabel the field "Investor CSD" to "NCB Custodian" in SoH screens	22/06/2024

Annex 3 - Operational day schedules

ECMS Process/event	ECMS Standard day schedule (Cut Off Time/start of process in CET)	ECMS Release Day schedule (Cut off/start of the process in CET)
Pre-Production environment		
Credit Claims Mobilisation and		
Demobilisation	15:15:00.000	13:45:00.000
Credit Claims Mobilisation and		
Demobilisation U2A	15:15:00.000	13:45:00.000
Fixed Term Deposits and OMO	15:15:00.000	13:45:00.000
Cash Collateral	15:15:00.000	13:45:00.000
Credit Freezing	15:15:00.000	13:45:00.000
Externally Managed Collateral	15:15:00.000	13:45:00.000
Max CreditLine	15:15:00.000	13:45:00.000

Change of business day:	16:15:00.000	14:45:00.000
CLM	16:15:00.000	14:45:00.000
MLOR For NCB	16:10:00.000	14:40:00.000
MLOR For Counterparty	15:45:00.000	15:15:00.000
Triparty reports and request of demobilisation	15:15:00.000	13:45:00.000
NCB Rating Flow	17:30:00.000	17:30:00.000
Mobilisation and Demobilisation	15:15:00.000	13:45:00.000

Annex 4 - T2S/CLM Simulator

1 CLM & T2S Simulators - Introduction

The CLM and T2S Simulators are configured and operated by the ECMS Operator. Only the ECMS Operating Team can access the CLM and T2S Simulators.

Simulators are used when connection between the ECMS on the one hand and T2S and/or CLM on the other hand are not available during UT phases.

Simulators will reply to ECMS expected messages according to the ECMS UDFS.

Simulators provide three main functionalities:

- CLM Simulator
- T2S Simulator
- A Graphical Interface (GUI) dedicated to the ECMS Operator to operate the tool. This GUI is not part of this document since it is not available to the testing teams.

2 Support to users

In case of unexpected outcome to a test case, pointing to a potential misbehaviour of the simulator, the tester is invited to contact their National Central Banks to open an incident ticket with ECMS Service Desk with the timestamp of the file, message or screen input for the ECMS Operator to be able to investigate.

3 Simulated Messages

3.1. CLM simulator messages

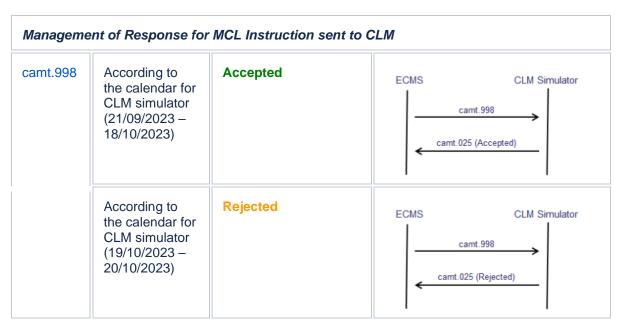
This "basic" simulator is hardcoded and would answer only positively or negatively depending on the test calendar. This means that the Simulator response is purely based on whether the Simulator is set-up for a Yes or No mode and does not depend on a set of rules previously defined.

Date from	Date to	Duration	CLM Simulator mode
10/04/2024	24/06/2024	10.5 weeks	Yes

CLM Simulator Message In	Routing Criteria	Response Type	e Me	essage Flows (Message type t)
	ent of Response for Pay InstitutionCreditTransfe		sent to CLN	И
pacs.009	According to the calendar for CLM simulator (21/09/2023 – 18/10/2023)	Accepted	ECMS	CLM Simulator PACS.009 PACS.002 (Settled)
	According to the calendar for CLM simulator (19/10/2023 – 20/10/2023)	Rejected	ECMS	CLM Simulator pacs.009 pacs.002 (Rejected)

Management of Response for Payment Instruction sent to CLM (FinancialInstitutionDirectDebit)

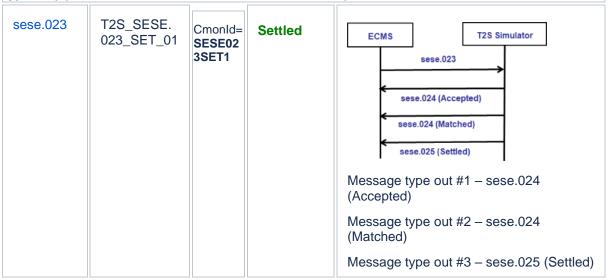


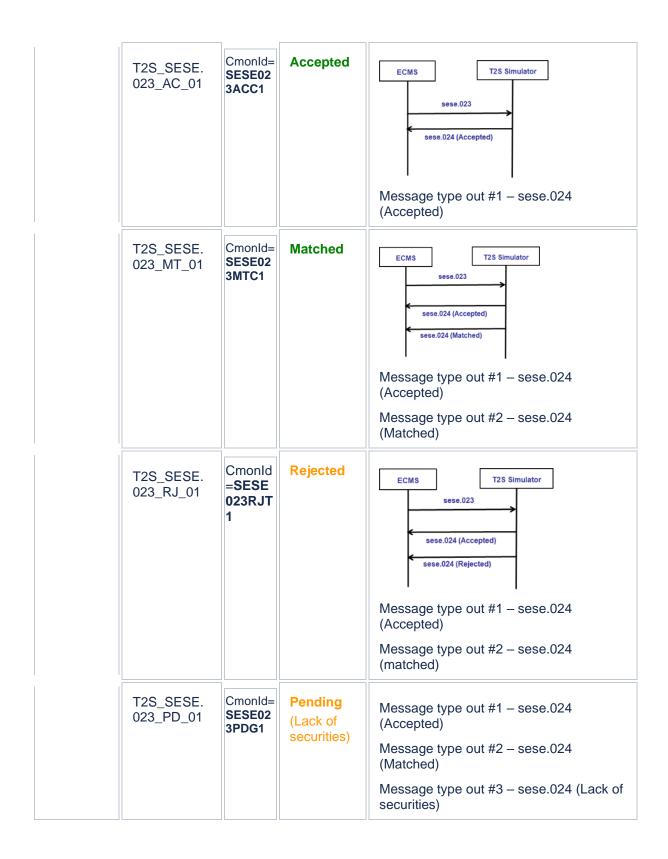


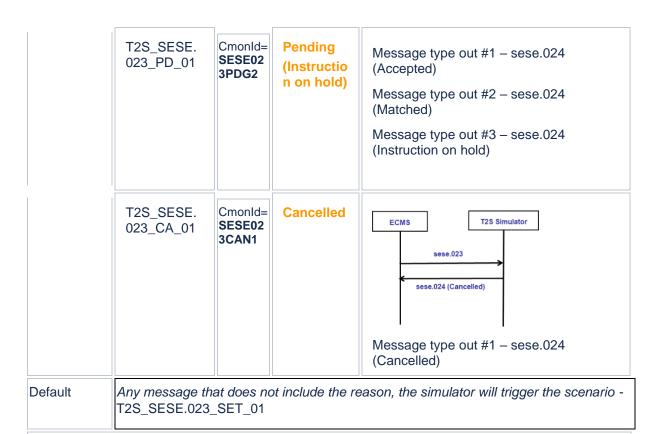
3.2. T2S Simulator message

Message criteria l

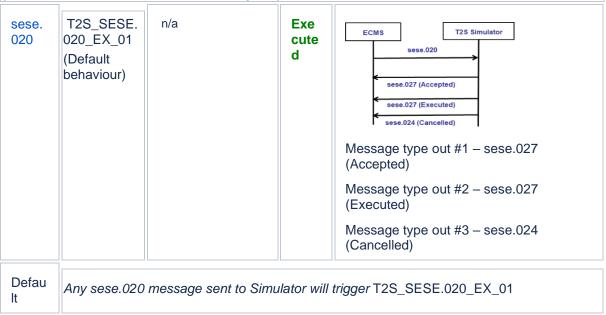
Management of Response for (de)Mobilisation Instruction sent to T2S. Based on the routing criteria, the user will receive a specific set of messages from ECMS simulator (i.e. Message type out) (SecuritiesSettlementTransactionInstruction)







Management of response for a cancelation of a (de)mobilization instruction sent to T2S (SecuritiesTransactionCancellationRequest)



4 Management of Messages with example

4.1. Management of sese.020 messages with example

Message Type In	Rule Id	Routing Criteria	Rule Type	Mess age Type Out #1	Messa ge Type Out #2	Messa ge Type Out #3
sese.020.00 1.06	T2S_SESE.020 _EX_01	n/a	Executed	sese. 027	sese.0 27	sese.0 24

4.2. Management of sese.023 messages with example

Message Type In	Rule Id	Routing Critieria	Rule Type	Messa ge Type Out #1	Mess age Type Out #2	Mess age Type Out #3	Mess age Type Out #4	
sese.023. 001.09	T2S_SESE.023 _SET_01	CmonId=SESE 023SET1	Settled	sese.0 24	sese. 024	sese. 025		
	T2S_SESE.023 _ACC_01	CmonId=SESE 023ACC1	Accepted	sese.0 24				
	T2S_SESE.023 _MTC_01	CmonId=SESE 023MTC1	Matched	sese.0 24	sese. 024			
	T2S_SESE.023_ RJT_01	CmonId=SESE 023RJT1	Rejected	sese.0 24	sese.0 24			
	T2S_SESE.023 _PDG_01	CmonId=SESE 023PDG1	Pending	sese.0 24	sese.0 24	sese.0 24		
	T2S_SESE.023 _PDG_02	CmonId=SESE 023PDG2	Pending	sese.0 24	sese. 024	sese. 024	sese. 024	
	T2S_SESE.023 _CAN_01	CmonId=SESE 023CAN1	Cancelled	sese.024				
	Default	Any message that does not include the reason, the simulator will trigger the rule id - T2S_SESE.023_SET_01						

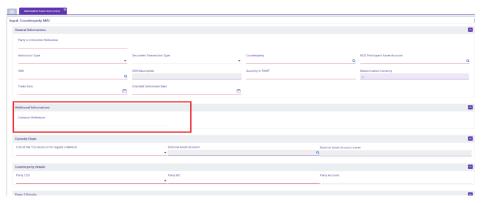
The rooting Criteria is based on the content of the attribute Common Reference indicated in the Marketable Asset Settlement Instruction:

As example, if the targeted scenario is the following:

T2S_SESE.023_SET_0 1	CmonId=SESE023SET	Settle d	sese.02	sese.02 4	sese.02 5	
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Then in the MA instruction the common Reference should be filled with the value SESE023SET1

- U2A Input of MA Instruction:



- A2A Input of MA Instruction: