T2 Mandatory Test Cases

applicable to T2 Participants

Version:	1.5.00
Status:	Final
Date:	05/08/2024

Contents

1 Introduction 4
1.1 Approach 4
1.2 Co-managers and co-managees 4
1.3 Test case template methodology 5
2 Test cases 7
2.1 Test case overview 7
2.1 CLM and RTGS Account Holders 9
T2_TC_AH_ID1 - Create Message Subscription Rule 9
T2_TC_AH_ID2 - Create Certificate DN 10
T2_TC_AH_ID3 - Create User Certificate DN Link 11
T2_TC_AH_ID4 - Creation and execution of Standing Order 12
T2_TC_AH_ID5 - Verification of RTGS directory 14
2.2 CLM Account Holders 15
T2_TC_CLM_AH_ID1 - CLM liquidity transfer order to either RTGS DCA, TIPS or T2S DCA 15
T2_TC_CLM_AH_ID2 - CLM liquidity transfer order between two MCAs 17
T2_TC_CLM_AH_ID3 - Available liquidity CLM query 19
T2_TC_CLM_AH_ID4 - Recourse to a deposit facility including refund and interest of overnight deposit 20
T2_TC_CLM_AH_ID5 - Verify Credit Line increase and decrease 23
T2_TC_CLM_AH_ID6 - CLM - Create and Receive Statement of account 25
T2_TC_CLM_AH_ID7 – CLM Liquidity transfer from either RTGS, TIPS or T2S to CLM (from CLM GUI) 27
2.3 RTGS Account Holders 29
T2_TC_RTGS_AH_ID1 - Send Liquidity Credit Transfer 29
T2_TC_RTGS_AH_ID2 - Receive Liquidity Credit Transfer camt.054 30
T2_TC_RTGS_AH_ID3 - Receive Resolution Of Investigation camt.029 31
T2_TC_RTGS_AH_ID4 - Send Financial Institution Credit Transfer pacs.009 32
T2_TC_RTGS_AH_ID5 - Receive Financial Institution Credit Transfer pacs.009 35
T2_TC_RTGS_AH_ID6 - Send Customer Credit Transfer pacs.008 36
T2_TC_RTGS_AH_ID7 - Receive Customer Credit Transfer pacs.008 38
T2_TC_RTGS_AH_ID8 - Send Financial Institution Direct Debit pacs.010 39
T2_TC_RTGS_AH_ID9 - Request payment order revocation 41
T2_TC_RTGS_AH_ID10 - Send Payment Return pacs.004 42
T2_TC_RTGS_AH_ID11 - Receive Payment Return pacs.004 44
T2_TC_RTGS_AH_ID12 – RTGS - Create and Receive Statement of account 45
2.4 Ancillary Systems 48
T2_TC_AS_ID1 - AS settlement procedure A 48
T2_TC_AS_ID2 - AS settlement procedure B 49

T2_TC_AS_ID3 - AS settlement procedure C 50
T2_TC_AS_ID4 - AS settlement procedure D 52
T2_TC_AS_ID5 - AS settlement procedure E 53

1 Introduction

This document contains the test approach regarding the T2 Mandatory testing and a detailed description of test cases for the T2 participants.

1.1 Approach

The set of test cases in this document are mandatory for directly connected T2 Participants[1]. T2 Participants constitutes Payment Banks and Ancillary Systems.

T2 Participants should progress logically through the tests, commencing with the CRDM related activities, then progressing to the CLM and RTGS related activities. All the evidence must be gathered and attached in the certification testing template. The recommendation is that CRDM and reference data related tests are carried out during the Pre-Migration testing if possible.

Please note that these tests are not an exhaustive set of test cases for T2 Participants. If relevant, the National Central bank may provide to the participants a set of additional authorisation test cases to be carried out. The tests must be carried out in the T2 Pre-production Test environment (known informally as UTEST). The test cases have been selected in order to evaluate the participants' capability to perform the basic functions of the system. It is the responsibility of each T2 participant to ensure that all functionalities related to their business will be tested. The tests can be performed in two-eyes mode, but evidence provided including four-eyes mode screenshots will be accepted. In some cases, cooperation is required between participants to prove a test case e.g. between Ancillary system and Payment bank.

The Participants will submit the evidence (screenshots and files) to their National Service Desk, which will confirm the success of the testing after the successful evaluation of the provided evidence.

1.2 Co-managers and co-managees

The T2-TRSG has agreed that co-managers will be responsible for the performance of mandatory test cases on behalf of their co-managees.

If the co-manager co-manages one or more co-managees (both co-manager and all co-managees, under the responsibility of the same central bank) then the submission of test case evidence to the co-manager NCB related to just one of these co-managees will be sufficient. In any case, the co-managee will report to its NCB (if requested) about its readiness in the context of the testing phase

[1] Only the co-manager is responsible for executing mandatory test cases. Co-managed participants are exempt from the mandatory test cases and fall under the umbrella of the co-manager. This also means that if the co-manager does not supply evidence of the completed test cases, both co-manager and co-managed participant will be reported as not having completed the test cases. The co-manager only has to provide one set of mandatory test cases from one party (this can be its own party). However, if a test case applies to the co-managed participant and not the co-managers party itself, the co-manager must provide evidence of the mandatory test case that would be applicable to the co-managed participant (e.g. the co-manager does not use a specific message for its own party but it is used for the co-managed party. In this case the co-manager must provide evidence for completion of such test case).

(User testing status, completion percentage of mandatory test cases, expected completion date, etc.)

If a co-managee is co-managed by a co-manager in a foreign country, then this co-managee must request the evidence from his co-manager and submit it to his own NCB (if requested by its NCB).

It is the responsibility of the co-manager for a co-managee in a foreign country to carry out any locally mandated tests (e.g authorisation tests) by the NCB of the co-managee.

The NCB of a co-manager may also share the evidence submitted in Darwin to allow other NCBs to access it should they wish.

1.3 Test case template methodology

The table below describes the elements included in the test case template.

Test Case ID	T2_TC_(RTGS/CLM), AH/AS followed by an ID number for identification purposes.
Test case name	Descriptive name of the test case
Relevant for (actor)	(CLM/RTGS) Account Holder / Ancillary System (AS)
Domain	Indicates the TARGET Services domain e.g., CRDM / CLM / RTGS in which the test case is carried out.
Sub Domain	Possible values include: CRDM_GUI Liquidity transfer order (LTO), Query (QUER), Minimum Reserve (MR) Maintain Credit Line (MCL) Credit Transfer Order (CTO) Ancillary System Procedures x (ASP A/B/C/D/E)
Input mode	U2A or A2A (the user choses one of the two input modes corresponding to the input mode that will be used in Production. U2A (the test case can only be carried out in U2A) A2A (the test case can only be carried out in A2A)
Mandatory	Yes or Conditional (COND - any exempt or specific conditions to be considered)
Detailed Description	Short description followed by the required step to perform the test cases first in U2A then in A2A (where applicable)
Preconditions/Details	Preconditions required to carry out the test case
Expected results	The expected and required outcome of the test case in U2A and A2A (if applicable)

Test evidence	Description of the required test evidence for the U2A and A2A (if applicable) execution.
Relevant Documentation	References to the User Detailed Functional Specifications (UDFS), User Handbook (UHB) and/or the Pre-Migration Schedule (PMS).
Related privileges	Required privileges to carry out the test case.
Related roles	Required CB/AH roles to carry out the test case.

2 Test cases

2.1 Test case overview

CLM and RTGS Account Holders

Test ID	Domain	Input Mode	Test Case name	Mandatory
T2_TC_AH_ID1	CRDM	U2A	Create Message Subscription Rule Set Create Message Subscription Rule	COND
T2_TC_AH_ID2	CRDM	U2A	Create Certificate DN	Yes
T2_TC_AH_ID3	CRDM	U2A	Create User Certificate DN Link	Yes
T2_TC_AH_ID4	CRDM	U2A or A2A	Standing Order execution	Yes
T2_TC_AH_ID5	CRDM	U2A or A2A	Verification of RTGS directory	COND

CLM Account Holders

Test ID	Domain	Input Mode	Test Case name	Mandatory
T2_TC_CLM_AH_ID1	CLM	U2A or A2A	CLM liquidity transfer order either to RTGS, TIPS or T2S DCA	COND
T2_TC_CLM AH_ID2	CLM	U2A or A2A	CLM liquidity transfer order between two MCAs	COND
T2_TC_CLM_AH_ID3	CLM	U2A or A2A	Available liquidity CLM query	Yes
T2_TC_CLM_AH_ID4	CLM	U2A or A2A	Recourse to a deposit facility including refund and interest of overnight deposit	COND
T2_TC_CLM_AH_ID5	CLM	U2A or A2A	Verify Credit line increase and decrease	COND
T2_TC_CLM_AH_ID6	CLM	U2A or A2A	Create and Receive Statement of account	Yes
T2_TC_CLM_AH_ID7	CLM	U2A	CLM Liquidity transfer from either RTGS, TIPS or T2S to CLM	Yes

RTGS Account Holders

Test ID	Domain	Input Mode	Test Case name	Mandatory

T2_TC_RTGS_AH_ID1	RTGS	U2A or A2A	Send Liquidity Credit Transfer	Yes
T2_TC_ RTGS_AH_ID2	RTGS	U2A or A2A	Receive Liquidity Credit Transfer camt.054	COND
T2_TC_ RTGS_AH_ID3	RTGS	A2A	Receive Resolution of Investigation camt.029	COND
T2_TC_ RTGS_AH_ID4	RTGS	U2A or A2A	Send Financial Institution Credit Transfer pacs.009	Yes
T2_TC_RTGS_AH_ID5	RTGS	U2A or A2A	Receive Financial Institution Credit Transfer pacs.009	Yes
T2_TC_RTGS_AH_ID6	RTGS	U2A or A2A	Send Customer Credit Transfer pacs.008	Yes
T2_TC_RTGS_AH_ID7	RTGS	U2A or A2A	Receive Customer Credit Transfer pacs.008	Yes
T2_TC_RTGS_AH_ID8	RTGS	A2A	Financial Institution Direct Debit pacs.010	COND
T2_TC_RTGS_AH_ID9	RTGS	A2A or U2A	Request payment order revocation	Yes
T2_TC_RTGS_AH_ID10	RTGS	U2A or A2A	Send Payment Return pacs.004.	COND
T2_TC_RTGS_AH_ID11	RTGS	U2A or A2A	Receive Payment Return pacs.004.	Yes
T2_TC_RTGS_AH_ID12	RTGS	U2A or A2A	RTGS - Create and receive Statement of account	Yes

Ancillary Systems

Test ID	Domain	Input Mode	Test Case name	Mandatory
T2_TC_AS_ID1	RTGS	A2A	AS settlement type procedure A	COND
T2_TC_AS_ID2	RTGS	A2A	AS settlement type procedure B	COND
T2_TC_AS_ID3	RTGS	A2A	AS settlement type procedure C	COND
T2_TC_AS_ID4	RTGS	A2A	AS settlement type procedure D	COND
T2_TC_AS_ID5	RTGS	A2A	AS settlement type procedure E	COND

2.1 CLM and RTGS Account Holders

T2_TC_AH_ID1 - Create Message Subscription Rule

Test Case ID	T2_TC_AH_ID1
Test case name	Create Message Subscription Rule Set Create Message Subscription Rule
Relevant for	CLM and RTGS Account Holders
Domain	CRDM
Sub Domain	CRDM_GUI
Input mode	U2A
Mandatory	Conditional Not applicable to U2A only parties
Detailed Description	The test case describes how to set up a rule set and adding a rule to the set. 1. Select Common → Messages and Reports → Message Subscription Rule Set → click on New button 2. Fill out the required form data and click on submit button in order to create a Rule Set. 3. When the set is created, the rules can be added to the rule set in order to subscribe the party to some messages (e.g. camt.054 and pacs.002). At least one rule has to be added to the set.
Preconditions/Details	The user has the required privileges to use the GUI screen. The rule set must be created before rules can be added
Expected results	The rule set is successfully created and at least one rule has been added to the set
Test evidence	CRDM GUI Screenshot
Relevant Documentation	CRDM UDFS: 1.2.3. Message subscription CRDM UHB: 2.3.4 Message and Reports 2.3.4.1 Message Subscription Rule Sets – Search/List Screen 2.3.4.2 Message Subscription Rule Set – Details Screen Context of Usage

	Pre-Migration Schedule: T2.PM.T2P.MSG.RSC
Related privileges	Create Message Subscription Rule Set Update Message Subscription Rule Set Create Message Subscription Rule Update Message Subscription Rule
Related roles	For CBs • CB National Service Desk (NCB) - 2E/4E For AH • AH CRDM Configuration Manager - 2E/4E

T2_TC_AH_ID2 - Create Certificate DN

Test Case ID	T2_TC_AII_ID2
Test case name	Create Certificate DN
Relevant for	CLM and RTGS Account Holders and Ancillary Systems
Domain	CRDM
Sub Domain	CRDM_GUI
Input mode	U2A
Mandatory	Yes
Detailed Description	This test case describes how to create a new user certificate distinguished name. 1. Select Common → Access Rights Management → Certificate Distinguished Names → New 2. Enter the mandatory information in the certificate distinguished name filed. 3. Click on the submit button 4. The new certificate distinguished name has been created
Preconditions/Details	The user has the required privileges to use the GUI screen.
Expected results	The certificate DN is successfully created
Test evidence	Screenshot

Relevant Documentation	UDFS 1.3.4 Access rights management UHB 3.3.2.2 Create a New Certificate Distinguished Name Pre-Migration Schedule T2.PM.AH.ARC.CU
Related privileges	Create Certificate Distinguish Name User Certificate DN Link Query
Related roles	For CBs • CB Access rights admin - 2/4E For AH • AH Access Rights Admin - 2E/4E

T2_TC_AH_ID3 - Create User Certificate DN Link

Test Case ID	T2_TC_AII_ID3
Test case name	Create User Certificate DN Link
Relevant for	CLM and RTGS Account Holders
Domain	CRDM
Sub Domain	CRDM_GUI
Input mode	U2A
Mandatory	Yes
Detailed Description	This test case describes how to create a new user certificate DN link. 1. Select Common → Access Rights Management → User Certificate Distinguished Name Links. In this screen, the user selects the "New" option; 2. Enter the mandatory fields and click the "Submit" button. 3. A message appears in the top of the screen indicating that the task has been completed successfully.
Preconditions/Details	The user has the required privileges to use the GUI screen. A User and a Certificate Distinguished Name have to be created before the link can be configured.
Expected results	The link is successfully created

Test evidence	Screenshot
Relevant Documentation	UDFS CRDM 1.2.2.1.4 User 1.2.2.3.2 Configuration of access rights at user level UHB CRDM 3.2.2 Configuration of a User 3.2.2.1 Create a New User 3.2.2.3 Create a New Certificate Distinguished Name Link
Related privileges	Create User Certificate Distinguish Name Link User Certificate DN Link Query
Related roles	For CBs • CB Access rights admin - 2/4E • CB Reader - 2E For AH • AH Access Rights Admin - 2E/4E

T2_TC_AH_ID4 - Creation and execution of Standing Order

Test Case ID	T2_TC_AH_ID4
Test case name	Creation and execution of Standing Order
Relevant for	All participants
Domain	CRDM
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Yes, at least for U2A
Detailed Description	The account holder must configure a standing order mandate for the account which will be debited. A successful debit of the payer account and the successful transfer to the payee account is required. U2A: 1. Select Common/Cash/Standing/Predefined Liquidity Transfer Order → and click on the sub-menu “new” 2. Fill in the Order Reference and fill in the valid from and valid to fields. The amount and order type must also be entered. To ensure that the standing order is executed correctly, it is

	essential to define the event for which the order is to be executed. A 'Cash Account' or an 'External RTGS Account' can be selected for the Creditor Account Type. Finally, the Creditor and Debtor Cash Account Number of the respective accounts must be selected. 3. Afterwards click on 'Submit'. 4. The next step is the NRO query. If this is completed successfully, a positive system confirmation is issued. A2A: The camt.024 message is sent by a payment bank to CRDM to create or modify a Standing or Predefined Liquidity Transfer.
Preconditions/Details	Sufficient liquidity on the account to be debited.
Expected results	Camt.054 received if configured (applicable for U2A and A2A) U2A: The LT is visible in the Query Cash Transfers/List Cash Transfers/Details of cash transfers A2A: The liquidity transfer order is correctly settled and the submitting actor receives a camt.025 with the code value SSTS (SettlementStatus). To notify the settlement, the creditor receives a camt.054.001.08 BankToCustomerDebitCreditNotification with local instrument (LIIE) Additional process steps in case of an inter-service liquidity transfer order.
Test evidence	Either the change of balance on the CLM account or the notification to the CLM account holder can be used as test evidence.
Relevant Documentation	T2 CLM UDFS 9.6.2 T2 CRDM UHB 2.3.2.10
Related privileges	Create Liquidity Transfer Order Update Liquidity Transfer Order
Related roles	For CBs • CB National Service Desk (NCB) For AH • AH CRDM Liquidity Manager 2E/4E

T2_TC_AH_ID5 - Verification of RTGS directory

Test Case ID	T2_TC_AH_ID5
Test case name	Verification of RTGS directory
Relevant for	All participants
Domain	CRDM
Sub Domain	CRDM_GUI
Input mode	U2A to subscribe, download in either U2A or A2A mode
Mandatory	COND
Detailed Description	Participant must subscribe for the RTGS directory in delta mode.
Preconditions/Details	
Expected results	The RTGS directory is successfully downloaded, and the records can be found. If there is no change in the RTGS directory the delta report is empty.
Test evidence	The RTGS directory in xml format
Relevant Documentation	CRDM UHB 2.4.3.2 RTGS Directory – Search/List Screen
Related privileges	RTGS Directory query
Related roles	For CBs • CB Reader 2E For AH • AH CRDM Reader - 2E

2.2 CLM Account Holders

T2_TC_CLM_AH_ID1 - CLM liquidity transfer order to either RTGS DCA, TIPS or T2S DCA

Test Case ID	T2_TC_CLM_AH_ID1
Test case name	CLM liquidity transfer order to either RTGS, TIPS or T2S DCA
Relevant for	CLM Account Holders
Domain	CLM
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Conditional The following are exempt for this test case -institutions having an MCA for cash withdrawal only; -Institutions having an MCA to satisfy minimum reserve only. -institutions leaving the management of their account and liquidity to others (co-management).
Detailed Description	This test case describes the steps required to carry out a CLM liquidity transfer to either an RTGS, TIPS or T2S DCA. U2A 1. Select Liquidity → Liquidity Transfer – New Screen 2. An authorised user can enter a liquidity transfer order to transfer liquidity from an MCA to either RTGS, TIPS or T2S DCA through the New Liquidity Transfer Order page in GUI application. 3. The user fills in all fields correctly and clicks on 'Submit' button. 4. The user is requested to confirm the data and a success message appears. 5. The liquidity transfer order is created and settled. There is also a 'Reset' button available to cancel the modification. A2A 1. The participant sends a camt.050 (to transfer liquidity from an MCA to either RTGS, TIPS or T2S DCA) which passes technical and business validation.
Preconditions/Details	The debtor Party needs to be a CLM account holder and needs to be authorised to debit the MCA. The user has access to the New Liquidity Transfer order page (U2A only)

	Message subscription exists for the credit notification (A2A only) Sufficient liquidity is held (unreserved) to effect settlement
Expected results	Camt. 054 received if configured (applicable for U2A and A2A) U2A The LT is visible in the Query Cash Transfers/ List Cash Transfers/ Details of cash transfers A2A The processing continues with 'Submit to settlement'. The liquidity transfer order is correctly settled and the submitting actor receives a camt.025 with the code value SSTS (SettlementStatus). To notify the settlement, the creditor receives a camt.054.001.08 BankToCustomerDebitCreditNotification with local instrument (LIIE)
Test evidence	U2A: A Liquidity Transfer order with status “settled” can be visible from one of the following screen: Query Cash Transfers/ List Cash Transfers/ Details of cash transfers. Therefore, a screenshot of the liquidity transfer with status “settled” could be requested from “Query Cash Transfers” screen/ “List Cash Transfers” screen or “Details of cash transfers” screen A2A: Copy of the camt.025 (A2A) (and optional camt.054)
Relevant Documentation	UDFS CLM: 5.4.2.3.3 Immediate inter-service liquidity transfer between two dedicated accounts in different settlement services UHB CLM: 5.2.1 CLM Cash Account Liquidity – Query Screen 5.2.5 Liquidity Transfer – New Screen 6.2.1 Display cash account liquidity (one service only)
Related privileges	CLM Create Liquidity Transfer Order CLM Liquidity Transfer Order Detail Query CLM Liquidity Transfer Order List Query CLM Initiate Immediate Liquidity Transfer CLM Query Cash Transfer Detail CLM Query Cash Transfer
Related roles	For CBs • CB CLM Reader

	• CB National Service Desk (NCB) For AH • AH CRDM Liquidity Manager - 2E/4E • AH CLM Reader - 2E

T2_TC_CLM_AH_ID2 - CLM liquidity transfer order between two MCAs

Test Case ID	T2_TC_CLM_AH_ID2
Test case name	CLM liquidity transfer order between two MCAs
Relevant for	CLM Account Holders
Domain	CLM
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Conditional Requires a liquidity transfer group.
Detailed Description	This test case describes the steps required to carry out a liquidity transfer order from one MCA to another MCA. U2A 1. Select Liquidity → Liquidity Transfer – New Screen 2. Enter a liquidity transfer order to another MCA 3. Click on 'Submit' button. 4. The user is requested to confirm the data and a success message appears. 5. The liquidity transfer order is created. There is also a 'Reset' button available to cancel the modification. A2A 1. The participant sends a camt.050 (to transfer liquidity from an MCA to a MCA which passes technical and business validation.
Preconditions/Details	The debtor Party needs to be a CLM account holder and needs to be authorised to debit the MCA. Message subscription exists for the camt.054 credit notification (optional) MCAs belong to the same Liquidity Transfer Group
Expected results	U2A: The LT has settled (with cash transfer status "settled" and is visible in

	the Query Cash Transfers/ List Cash Transfers/ Details of cash transfers. The debited and credited MCA received a Camt.054 (if configured in CRDM). A2A: The liquidity order transfer is not earmarked due to blocking and the processing continues with 'Submit to settlement'. The liquidity transfer is correctly settled and the sender receives a camt.025 with the code value SSTS (SettlementStatus). To notify the settlement, the creditor receives a camt.054.001.08 BankToCustomerDebitCreditNotification with local instrument (LIIA).
Test evidence	U2A: A Liquidity Transfer order with status "settled" can be visible from one of the following screen: Query Cash Transfers/ List Cash Transfers/ Details of cash transfers. Therefore, a screenshot of the liquidity transfer with status "settled" could be requested from "Query Cash Transfers" screen/ "List Cash Transfers" screen or "Details of cash transfers" screen A2A: A copy of the camt.025
Relevant Documentation	UDFS CLM: 5.4.2.3.2 Immediate intra-service liquidity transfer between two CLM Accounts CLM UHB: 5.2.5 Liquidity Transfer – New Screen
Related privileges	Create Liquidity Transfer Order Liquidity Transfer Order Detail Query Liquidity Transfer Order List Query CLM Initiate Immediate Liquidity Transfer CLM Query Cash Transfer Detail CLM Query Cash Transfer
Related roles	For CBs • CB National Service Desk (NCB) • CB CLM Reader - 2E For AH • AH CRDM Liquidity Manager - 2E/4E • AH CLM Reader - 2E

T2_TC_CLM_AH_ID3 - Available liquidity CLM query

Test Case ID	T2_TC_CLM_AH_ID3
Test case name	Available liquidity CLM query
Relevant for	CLM Account Holders
Domain	CLM
Sub Domain	QUER
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	The purpose of this test case is to verify that the user can query the available liquidity of its CLM accounts U2A 1. Select Liquidity → CLM Cash Account Liquidity – Query Screen → [Submit] → CLM Cash Account Liquidity – Display Screen 2. From the cash account liquidity query screen, the user can search the available liquidity on one, many or all accounts that a user is authorised to see through U2A interface. 3. The users can query within their data scope, which is determined by the Party BIC. A2A 1. The user sends a GetAccount camt.003 “Query request message - available liquidity CLM query” to CLM. 2. The user receives a ReturnAccount camt.004 in response. “Query response for business data - available liquidity CLM query” with the requested balance information according to the specified search criteria.
Preconditions/Details	A party with accounts in CLM and RTGS should exist.
Expected results	The user can see the overall liquidity of the selected account from the search criteria.
Test evidence	U2A: Screenshot of the overall liquidity of an account (intra-service).

	A2A: Screenshot of the ReturnAccount camt.004
Relevant Documentation	UDFS CLM: 8.6 Query management - CB specific queries 8.7 Business/liquidity monitoring for CBs 9.25.1.2 Messages 12.2 Cash management (camt) UHB CLM 5.2.1 CLM Cash Account Liquidity – Query Screen
Related privileges	CLM Query Available Liquidity CLM Query Account Balance CLM Query local party cash account reference data CLM Query Monitoring Screen “Available Liquidity per Account Holder”
Related roles	For CBs • CB CLM Reader - 2E For AH • AH CLM Reader 2E

T2_TC_CLM_AH_ID4 - Recourse to a deposit facility including refund and interest of overnight deposit

Test Case ID	T2_TC_CLM_AH_ID4
Test case name	Recourse to a deposit facility including refund and interest of overnight deposit
Relevant for	CLM Account Holder
Domain	CLM
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Conditional: only required for payment banks with overnight deposit facility
Detailed Description	This test case describes how to make an overnight deposit with the respective central bank of a CLM account holder. U2A:

	1. Select Liquidity → and click on the sub-menu entry 'New Liquidity Transfer' 2. Enter the account number of the debit account. This can be the account number of the MCA, the RTGS DCA, the TIPS Account or the RTGS sub-account of the CLM account holder requesting the overnight deposit. 3. Enter the account number of the credit account. This has to be the account number of the Overnight Deposit Account owned by the Central Bank and opened in the name of the respective CLM account holder requesting the overnight deposit. 4. Enter the amount that is to be transferred and provide an end-to-end identification for the liquidity transfer order 5. Click on the 'Submit' Button in order to submit the liquidity transfer order. A2A 6. The camt.050 message is sent by a payment bank to CLM to fund its own OD account. For refund of overnight deposit and interest of overnight deposit 1. The reimbursement of deposited capital is initiated by CLM sub-process at the beginning of the settlement window for CBOs i.e. event Start of CLM RTS 2. CLM check whether interest rate is zero or not zero. 3. If interest rate is zero, a check on the need for accumulation for out CB is performed. If no need to accumulate, then process ends. If there is a need of accumulation, then accumulate monthly overnight deposit interest. Create monthly warehoused overnight deposit interest payment order and submit to settlement. 4. If interest rate is not zero, then interest for the overnight deposit is calculated. CLM triggers creation of overnight deposit payment order which is submitted to settlement. 5. CLM triggers automatically the cash transfer orders: Liquidity transfer order for the transfer of the capital amounts to the CLM Account Holder's default MCA; 6. The Liquidity transfer order is settled.
Preconditions/Details	Sufficient liquidity on the account to be debited. The account holder opted to receive a confirmation message camt.054.

	The CB has created a separate overnight deposit account per monetary policy counterparty using the overnight deposit functionality
Expected results	U2A: notification area shows whether the submission of the data has been completed A2A: Successful camt.025 is received For refund of overnight deposit and interest of overnight deposit: The account to be debited is the overnight deposit account of the CB for the respective CLM Account Holder requesting the overnight deposit reverse order. The account to be credited is the MCA of the CLM Account Holder requesting the overnight deposit reverse order.
Test evidence	U2A: screenshot of the notification area after submitting the liquidity transfer order or the screenshot of the liquidity transfer order with status “settled” that can be requested from “Query Cash Transfers” screen, “List Cash Transfers” screen or “Details of cash transfers” screen A2A: copy of the successful camt.025 For refund of overnight deposit : Confirmation of the increase in balance of the CLM account holder after the refund is processed. For interest of overnight deposit: 1. For positive interest rate, a payment order for interest payments to be paid to the CLM Account Holder’s default MCA; 2. For negative interest rate, a payment order for interest payments to be paid by the CLM Account Holders, i.e. to be debited on the CLM Account Holder’s default MCA; 3. If the overnight deposit interest is lower than 0,005 EUR (e.g. 0,0002 EUR) no payment order for interest payments is created. 4. For interest rate of 0.00 % no payment order is created.
Relevant Documentation	CLM UHB 6.2.5 Enter overnight deposit CLM UDFS 9.23 Processing of standing facilities 9.23.1 Process overnight deposit - setting up order 9.23.2 Process overnight deposit - reverse order 9.24.3 Process overnight deposit – refund and interest CLM UDFS - Table 66 and Table 67
Related privileges	CLM Initiate Overnight Deposit

	CLM_IniOveDep CLM_IniImLiquiTrans CLM_QueryAccBal CLM_QueryAvaLiq CLM_QueryCashTrans CLM_QueryStaFac
Related roles	For CBs • CB CLM Reader - 2E • CB CLM Manager - 2E/4E For AH • AH T2S Liquidity Manager - 2E/4E • AH CLM Reader 2E

T2_TC_CLM_AH_ID5 - Verify Credit Line increase and decrease

Test Case ID	T2_TC_AH_ID5
Test case name	Verify Credit Line increase and decrease
Relevant for	CLM Account Holders
Domain	CLM
Sub Domain	MCL
Input mode	U2A, A2A
Mandatory	Conditional Not applicable for out-countries Not applicable for participants of Central Banks using connected payments.
Detailed Description	This test case describes the verification that a credit line increase and a decrease (delta) is received by CLM for a CLM account holder's default MCA from a CB (CMS) credit line increase U2A 1. The CB user can verify the credit line increase or decrease by

	going to Liquidity → Credit Line per Account Holder – Query Screen A2A 2. After successful execution, CLM sends a BankToCustomerDebitCreditNotification (camt.054) message, if subscribed, confirming the modification of the credit line on the default MCA to the CLM MCA Account Holder.
Preconditions/Details	Before the verification, the following steps are required for credit line increase: 1. A credit line increase (delta) is received in CLM from the CB (CMS). 2. Business validation is completed successfully, so the credit line increase is executed and a credit line modification execution notification is sent to the relevant CB (CMS). 3. Sub-Processes "automated liquidity transfer order with intermediate status" followed by "CLM floor and ceiling" are triggered. 4. A positive credit line modification notification message is sent to the CLM account holder. Before the verification, the following steps are required for credit line decrease: 1. A credit line decrease (delta) is received in CLM from the CB (CMS). 2. Business validation is completed successfully, so the credit line decrease is executed and a credit line modification execution notification is sent to the relevant CB (CMS). 3. Sub-Processes "automated liquidity transfer order with intermediate status" followed by "CLM floor and ceiling" are triggered. 4. A positive credit line modification notification message is sent to the CLM account holder. Additional preconditions include: - Default MCA exists for the selected CLM Account Holder. - A message subscription exists on CL modification notification for the CLM Account Holder.
Expected results	The relevant credit line is increased or decreased
Test evidence	U2A: Screenshot of the account holder credit line before and after the increase.

	A2A: Copy of the notification message
Relevant Documentation	CLM UHB: 5.2.3 Credit Line per Account Holder – Query Screen CLM UDFS 13.2 Credit line management (camt)
Related privileges	CLM Query Credit Line List
Related roles	For CBs • CB CLM Reader - 2E

T2_TC_CLM_AH_ID6 - CLM - Create and Receive Statement of account

Test Case ID	T2_TC_CLM_AH_ID6
Test case name	CLM - Create and Receive Statement of account
Relevant for	CLM Account holders
Domain	CRDM, CLM
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	This test case describes the steps required to create the statement of account by following the preconditions configurations and the steps to get the statement of MCA account (camt.053). U2A The Statement of account is provided during the EoD processing. The report is not created intraday. The report provides information about all items that are posted on a cash account and balance information of the current business day. The query of the Statement of Account in the CLM GUI is between the bank to bank cut off and the start of day events. U2A: 1. GUI CLM→ Cash Transfers and Messages→Download the Statement of Account 2. In Search Criteria/ General/ Party BIC: enter the BIC then click on "Download"

	A2A: The camt.053 message is sent by CLM. During the EoD, the report generation is triggered.
Preconditions/Details	U2A: For the account statement creation in CLM, parameters for the report must be set up and updated by the CRDM Actors when subscribing the report. 1. GUI CRDM→Common→Messages and Reports→Search→New, 2. CLM triggers the generation of the: Statement of account report based on the CRDM configuration 3. The owner parent BIC/Owner Party BIC/Configuration Name and Configuration description must be filled in ; the service is "CLM" and the report Name "CLM Statement of Account". 4. In the Party links, you must select the event type: CCOS and enter Opting Parent BIC, Opting Party BIC. + and click to the button "submit". A2A: For the account statement creation in CLM, parameters for the report must be set up and updated by the CRDM Actors when subscribing the report the configuration has to be the same as U2A with an added option: the "Push mode"
Expected results	During the EoD, the report is generated. Receiving Statement of Account: U2A/A2A: The statement of account, camt.053 should contained the same operations on the cash account that the one sent/received on the same day with an opening balance and a closing balance. During the EoD, the report generation is triggered.
Test evidence	Statement of accounts is received at EoD by the CLM Actor. The account must align to the parameters in the subscription. U2A/A2A: The xml report camt.053
Relevant Documentation	UHB CRDM, chapter "Create a New Report Configuration" UDFS CLM 5.7.2 CLM report generation Overview CLM - statement of accounts 9.25.2 Receive CLM report UHB - CLM

	5.1.22 Statement of Account-Download Screen 6.1.14 Download statement of account 7.1.86 Statement of Account-Download Screen
Related privileges	CLM_QueryAccStat Report configuration list query Create report configuration
Related roles	For CBs • CB CLM Reader - 2E • CB National Service Desk (NCB) - 2E/4E For AH • AH CLM Reader 2E • AH CRDM Configuration Manager -2E/4E

T2_TC_CLM_AH_ID7 – CLM Liquidity transfer from either RTGS, TIPS or T2S to CLM (from CLM GUI)

Test Case ID	T2_TC_CLM_AH_ID7
Test case name	CLM Liquidity transfer from either RTGS, TIPS or T2S to CLM (from CLM GUI)
Relevant for	CLM Account Holders
Domain	CLM Account Holders
Sub Domain	LTO
Input mode	U2A
Mandatory	Yes
Detailed Description	This test case describes the steps required to carry out a RTGS, TIPS or T2S liquidity transfer to a CLM account from the CLM GUI. 1. Select Liquidity → Liquidity Transfer – New Screen 2. An authorised user can enter a liquidity transfer order to transfer liquidity from either a RTGS, TIPS or T2S account to a CLM account through the New Liquidity Transfer Order page in CLM GUI application. The user fills in all fields correctly and clicks on 'Submit' button. 3. The user is requested to confirm the data and a success message

	appears. The liquidity transfer order is created and settled.
Preconditions/Details	The creditor Party needs to be a CLM account holder and needs to be authorised to debit the MCA. The user has access to the New Liquidity Transfer order page (U2A only) Message subscription exists for the credit notification (A2A only) Sufficient liquidity is held (unreserved) to effect settlement
Expected results	In the Query Cash transfer screen for the CLM account, the user verifies that the LTs from either RTGS, TIPS or T2S accounts are credited in the CLM account
Test evidence	Screenshot of each LT on the Liquidity/Query CLM cash account liquidity screen, with the status “settled”
Relevant Documentation	UDFS CLM: 5.4.2.3.3 Immediate inter-service liquidity transfer between two dedicated accounts in different settlement services UHB CLM: 5.2.1 CLM Cash Account Liquidity – Query Screen 5.2.5 Liquidity Transfer – New Screen 6.2.1 Display cash account liquidity (one service only)
Related privileges	CLM Create Liquidity Transfer Order CLM Liquidity Transfer Order Detail Query CLM Liquidity Transfer Order List Query CLM Initiate Immediate Liquidity Transfer CLM Query Cash Transfer Detail CLM Query Cash Transfer
Related roles	For CBs • CB CLM Reader • CB National Service Desk (NCB) For AH • AH CLM Manager 2E/4E • AH CRDM Liquidity Manager 2E/4E

2.3 RTGS Account Holders

T2_TC_RTGS_AH_ID1 - Send Liquidity Credit Transfer

Test Case ID	T2_TC_RTGS_AH_ID1
Test case name	Send Liquidity Credit Transfer
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	This test case describes the steps required to carry out a new liquidity transfer order from RTGS. U2A 1. Select Liquidity → Liquidity Transfer – New Screen 2. Enter the required details and press “Submit”. A2A 1. The participant sends a camt.050 (to transfer liquidity from an RTGS DCA which passes technical and business validation.
Preconditions/Details	Both sending and receiving accounts exist and are active The sender has subscribed to the relevant messages Respective privileges have been granted to the sender. RTGS DCAs belong to the same Liquidity Transfer Group (applicable if receiving account is an RTGS DCA)
Expected results	The DCA of the recipient is credited and senders accounts is debited. A camt.025 message is returned by RTGS.
Test evidence	U2A: screenshot of the settled cash transfer. The user can verify the liquidity transfer order by going to Cash Transfers and Messages →Cash Transfers – Query Screen → [Submit], then clicking on the arrow icon, the ‘Cash Transfers – List Screen’ to expand the list to view the details. A2A: Copy of the message (camt.025) returned by RTGS

Relevant Documentation	RTGS UDFS 5.5.2 Liquidity Transfer 5.5.2.3 Liquidity transfer process RTGS UHB 5.2.6 Liquidity Transfer – New Screen 5.1.2 Cash Transfers – List Screen
Related privileges	RTGS Initiate immediate Liquidity Transfer RTGS Initiate immediate liquidity transfer to/from sub-account RTGS Query Cash Transfer RTGS Query Cash Transfer Detail
Related roles	For CBs • CB RTGS Manager - 2E/4E • CB RTGS reader - 2E For AH • AH RTGS Liquidity Transfer Manager 2E/4E • AH RTGS Reader 2E

T2_TC_RTGS_AH_ID2 - Receive Liquidity Credit Transfer camt.054

Test Case ID	T2_TC_RTGS_AH_ID2
Test case name	Receive Liquidity Credit Transfer camt.054
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	LTO
Input mode	U2A or A2A
Mandatory	Conditional Required for participants using camt.054 messages
Detailed Description	In this test case, the RTGS account holder verifies and confirm the receipt of the LiquidityCreditTransfer camt.054 messages.
Preconditions/Details	Both sending and receiving accounts exist and are active Respective privileges have been granted to the sender. Sender has sent a liquidity transfer camt.050 message that has passed

	technical validation
Expected results	The DCA of the recipient is credited and senders accounts is debited. A camt.054 notification for the credit transfer is generated
Test evidence	U2A: A screenshot of the received camt.054 message from 'Messages – List Screen' or 'Messages – Details Screen'. A2A: copy of the camt.054
Relevant Documentation	RTGS UDFS 5.5.2 Liquidity Transfer 5.5.2.3 Liquidity transfer process RTGS UHB 5.1.2 Cash Transfers – List Screen
Related privileges	RTGS Query Cash Transfer RTGS Query Cash Transfer Detail
Related roles	For CBs • CB RTGS Manager - 2E/4E • CB RTGS reader - 2E For AH • AH RTGS Reader 2E

T2_TC_RTGS_AH_ID3 - Receive Resolution Of Investigation camt.029

Test Case ID	T2_TC_RTGS_AH_ID3
Test case name	Receive Resolution Of Investigation camt.029
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	A2A
Mandatory	Conditional

	Required for A2A users.
Detailed Description	The camt.029 is used to negatively answer a recall message. Debtor does not get the funds back. The process is initiated by a participant A sending a payment order to recipient B followed by a recall payment message (camt.056). Participant B then sends a camt.029 in response denying the payment recall. RTGS then forwards the reply to the RTGS Account Holder (A) that requested the recall. The objective of this test case is for the participant A to verify and confirm the receipt of camt.029 message.
Preconditions/Details	Participant A has sent a payment order to Recipient B. Participant A has sent a PaymentCancellationRequest camt.056 message Participant B has responded to the recall message with a ResolutionOfInvestigation camt.029 message rejecting the request Participant A has subscribed to the relevant notification messages
Expected results	A "Payment Acceptance recall Confirmation Notification" / Receipt (camt.025) is created and sent to the actor that sends the recall response. ResolutionOfInvestigation camt.029 message passes technical validation and sends the “Counterparty payment recall rejection”/ ResolutionOfInvestigation (camt.029) to the recall request submitting actor.
Test evidence	Copy of the received camt.029 message
Relevant Documentation	RTGS UDFS 5.3.8 Payment order revocation and payment recall 5.3.7 Payment order modification 9.5 Reject or confirm payment order recall RTGS UHB 5.1.8 Messages – List Screen
Related privileges	RTGS Query Message
Related roles	For CBs • CB RTGS reader - 2E For AH • AH RTGS Reader 2E

Test Case ID	T2_TC_RTGS_AH_ID4
Test case name	Send FinancialInstitutionCreditTransfer pacs.009.
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	This test case describes how to enter a new credit transfer order between financial institutions. U2A 1. Select ´Cash Transfers and Messages' and click on the submenu entry 'New Financial Institution Credit Transfer'. 2. Fill in the mandatory sub-sections of the section 'Business Application Header'. 3. Fill in the mandatory sub-sections of the section 'FinancialInstitution Credit Transfer'. 4. Click on the 'Submit' button. The notification area shows whether the submission of the credit transfer order has been completed A2A 1. A FinancialInstitutionCreditTransfer is submitted to RTGS by RTGS account holder (pacs.009).
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder. Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The submitter must have a message subscription in place to receive the pacs.002
Expected results	The credit transfer passes business validation and is settled with the full amount. U2A: A notification is displayed confirming the Financial Institution Credit Transfer was successfully submitted. A2A: The Message passes business validation and it is settled with full

	amount. Payment order counterparty receives a forwarded payment message (pacs.009 "outbound"). A positive PaymentStatusReport (pacs.002) notification is returned to the submitting actor if requested (if configured) Cash transfer Order is not subject to credit/debit notification, therefore the process ends.
Test evidence	U2A: Screenshot of the Payment status in the transfer details in the query screen in Cash Transfers and Messages → Cash Transfers – Query Screen. A2A: Copy of the pacs.009 message and copy of the returned Payment status report pacs.002 message (if configured)
Relevant Documentation	RTGS UDFS 12.4.4 FinancialInstitutionCreditTransfer (CORE and COV) (pacs.009) RTGS UHB 5.7.4 Cash Transfer Order Totals by Status – List Screen 5.1.7 Messages – Query Screen 5.1.13 Financial Institution Credit Transfer – New
Related privileges	RTGS Enter Financial institution credit transfer (except mandated payments) RTGS Query Message RTGS Query Message Details RTGS Send Financial Institution Credit Transfer RTGS Send Financial Institution Credit Transfer (except mandated payments)
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E For AH • AH RTGS Reader 2E • AH RTGS Inter-bank CT U2A 4E

T2_TC_RTGS_AH_ID5 - Receive Financial Institution Credit Transfer pacs.009

Test Case ID	T2_TC_RTGS_AH_ID5
Test case name	Receive Financial Institution Transfer pacs.009
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	The objective of this test case is for participant B to verify and confirm that its account is credited and the receipt of a pacs.009 message following the sending of a FinancialInstitutionTransfer pacs.009 message from participant A.
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder. Participant A has instructed pacs.009 credit transfer Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The relevant message subscription must be in place.
Expected results	The account of participant B is credited. The payment message pacs.009 is forwarded to the credited participant B.
Test evidence	U2A: Screenshot of the received financial institution transfer in the transfer details of the query screen (Cash Transfers and Messages → Cash Transfers – Query Screen) or a screenshot of the received pacs.009 message from 'Messages – List Screen' or 'Messages – Details Screen'. A2A: Copy of the received pacs.009 message

Relevant Documentation	RTGS UHB 5.1.13 Financial Institution Credit Transfer – New Screen 6.1.9 Enter payment order – pacs.009 RTGS UDFS: 12.4.4 FinancialInstitutionCreditTransfer (CORE and COV) (pacs.009)
Related privileges	RTGS Query Message RTGS Query Message Details
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E For AH • AH RTGS Reader 2E

T2_TC_RTGS_AH_ID6 - Send Customer Credit Transfer pacs.008

Test Case ID	T2_TC_RTGS_AH_ID6
Test case name	Send Customer Credit Transfer pacs.008
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	This test case describes the steps whereby participant A sends customer credit transfer order to participant B. U2A 1. Select RTGS → Cash Transfers and Messages → Customer Credit Transfer – New Screen 2. Fill in the mandatory sub-sections of the section 'Business Application Header'. 3. Fill in the mandatory sub-sections of the section 'FI To FI Customer Credit Transfer'.

	4. Optionally, fill in the additional sub-sections of the section 'FI To FI Customer Credit Transfer' 5. Click on the 'Submit' button. The notification area shows whether the submission of the credit transfer order has been completed A2A 1. A CustomerCreditTransfer pacs.008 is submitted to RTGS by RTGS account holder.
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder. Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The relevant message subscription must be in place. Debited account has sufficient liquidity to settle the payment.
Expected results	The payment order passes validation before it is debited on the RTGS/HVP DCA of A and simultaneously credited on the RTGS/HVP DCA of B. U2A: A notification is displayed confirming the Customer Credit Transfer was successfully submitted A2A: Payment order counterparty receives a forwarded payment message (pacs.008 "outbound"). A positive PaymentStatusReport (pacs.002) notification is returned to the submitting actor (if configured). Cash transfer Order is not subject to credit/debit notification, therefore the process ends. Outbound message is forwarded to the counterparty (beneficiary actor).
Test evidence	U2A: Screenshot of the Payment status in the transfer details in the query screen in Cash Transfers and Messages → Cash Transfers – Query Screen A2A: Copy of the pacs.008 messaged and a copy of the returned Payment status report pacs.002 message (if configured).

Relevant Documentation	RTGS UHB 5.1.12 Customer Credit Transfer – New Screen 6.1.8 Enter payment order – pacs.008 RTGS UDFS: 12.4.3 CustomerCreditTransfer (pacs.008)
Related privileges	RTGS Enter customer Credit Transfer RTGS Query Message RTGS Query Message Details RTGS Send Customer credit transfers (except mandated payments)
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E For AH • AH RTGS Reader 2E • AH RTGS Customer CT U2A 4E

T2_TC_RTGS_AH_ID7 - Receive Customer Credit Transfer pacs.008

Test Case ID	T2_TC_RTGS_AH_ID7
Test case name	Receive Customer Credit Transfer pacs.008
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	The objective of this test case is for participant B to verify and confirm that its account is credited and the receipt of a pacs.008 message following the sending of a CustomerCreditTransfer pacs.008 message from participant A.
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder.

	Participant A has instructed pacs.008 credit transfer Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The relevant message subscription must be in place.
Expected results	The account of participant B is credited. The payment message pacs.008 is forwarded to the credited participant B.
Test evidence	U2A: Screenshot of the received credit transfer in the transfer details of the query screen (Cash Transfers and Messages → Cash Transfers – Query Screen) or a screenshot of the received pacs.008 message from 'Messages – List Screen' or 'Messages – Details Screen' A2A: Copy of the returned CustomerCreditTransfer pacs.008 message.
Relevant Documentation	RTGS UHB 5.1.12 Customer Credit Transfer – New Screen 6.1.8 Enter payment order – pacs.008 RTGS UDFS: 12.4.3 CustomerCreditTransfer (pacs.008)
Related privileges	RTGS Query Message RTGS Query Message Details
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E For AH • AH RTGS Reader 2E

T2_TC_RTGS_AH_ID8 - Send Financial Institution Direct Debit pacs.010

Test Case ID	T2_TC_RTGS_AH_ID8
Test case name	Send Financial Institution Direct Debit pacs.010.
Relevant for	RTGS Account Holders
Domain	RTGS

Sub Domain	CTO
Input mode	A2A
Mandatory	Conditional Required for Payment Banks that use pacs.010 messages and input via A2A.
Detailed Description	This test case describes the direct debit between two financial institutions where the business sender is authorised to debit the RTGS Account of the business receiver. A2A 1. A FinancialInstitutionDirectDebitorder is submitted to RTGS by RTGS account holder (pacs.010).
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder. Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The relevant direct debit mandate must be in place. The relevant message subscription for pacs.002 must be in place.
Expected results	A2A: The Message passes business validation and it is settled with full amount. Payment order counterparty receives a forwarded direct debit message (pacs.010"outbound"). A positive PaymentStatusReport (pacs.002) notification is returned to the submitting actor. Cash transfer Order is not subject to credit/debit notification, therefore the process ends.
Test evidence	Copy of the pacs.002
Relevant Documentation	RTGS UDFS: 12.4.5 FinancialInstitutionDirectDebit (pacs.010) 9.2 Send RTGS message 11.3 Usage of Messages
Related privileges	RTGS Send Direct Debit
Related roles	For CBs • CB RTGS Manager - 2E/4E For AH

	• AH RTGS Payment Manager 2E/4E

T2_TC_RTGS_AH_ID9 - Request payment order revocation

Test Case ID	T2_TC_RTGS_AH_ID9
Test case name	Request payment order revocation
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	This test case describes the steps required for a AH (RTGS account holder A) user to revoke a queued payment order sent to a AH (RTGS account holder B) U2A 1. Select the main menu entry 'Cash Transfers and Messages' and click on the submenu entry 'Query Cash Transfers'. 2. Enter the relevant attribute values of the cash transfers that are to be displayed. 2. Click on the 'Submit' button. → The 'Cash Transfers – List Screen' opens. The list shows all cash transfers matching the entered search criteria 3. Select one or more cash transfer order(s) that are to be revoked. Right-click on the selected item(s) and select the context menu entry 'Revoke'. A confirmation pop-up opens showing details of the selected cash transfer order(s). 4. Click on the 'Yes' button to confirm the revocation of the cash transfer order(s). A2A 1. The revocation process starts by sending camt.056 and successful business validation (RTGS validates the message and checks whether the payment order has been settled or not) 2. RTGS revokes payment order if it is not settled.
Preconditions/Details	Revoking cash transfer orders is only possible for cash transfer orders (pacs.004, pacs.008, pacs.009 or pacs.010) with the status

	'Warehoused', 'Earmarked' or 'Queued' and for AS transfer orders with AS settlement procedure 'E' Queued payment (not settled) order exists in RTGS.before a request to revoke the orders is available.
Expected results	U2A: The user returns to the 'Cash Transfers – List Screen'. The notification area shows whether the submission of the data has been completed. A2A: payment order revoked - payment order revocation execution notification sent (camt.029) payment order revocation notification sent (pacs.002) sub process resolve queue from perform standard RTGS settlement. Pacs.002 message is received
Test evidence	U2A: Screenshot of the notification confirming the revoked payment or a screenshot of the revoked payment from 'Cash Transfers – List Screen' or 'Cash Transfers – Details Screen'. A2A: Copy of the pacs.002
Relevant Documentation	UDFS RTGS 5.3.7 Payment order modification UHB RTGS: 6.1.3 Revocation of payment
Related privileges	RTGS Revoke payment Order
Related roles	For CBs • CB RTGS Manager - 2E/4E For AH • AH RTGS Payment Manager 2E/4E

T2_TC_RTGS_AH_ID10 - Send Payment Return pacs.004

Test Case ID	T2_TC_RTGS_AH_ID10
Test case name	Send Payment Return pacs.004
Relevant for	RTGS Account Holders

Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Conditional Required for participants using pacs.004 messages
Detailed Description	This test case describes the scenario whereby a Payment return instruction is initiated by a direct participant B to direct participant A.U2A 1. The direct participant B initiates a liquidity transfer with the pacs.004 information through the GUI payment order screen. A2A. 1. The direct participant B generates a pacs.004 message in favour of A for execution of a return booking in the RTGS/HVP service
Preconditions/Details	Both submitting and correspondent actors are valid RTGS account holder. Instructing/Instructed Agents' RTGS accounts are open at payment's value date. The relevant message subscription must be in place
Expected results	The Message passes business validation and it is settled with full amount. U2A: A notification is displayed confirming the payment return was successfully submitted. A2A: Payment order counterparty receives a forwarded payment message (pacs.004 "outbound"). A positive PaymentStatusReport (pacs.002) notification is returned to the submitting actor (if requested) Cash transfer Order is not subject to credit/debit notification, therefore the process ends. Outbound message is forwarded to the counterparty (beneficiary actor).
Test evidence	U2A Screenshot of the Payment status in the Cash Transfers and Messages >> Cash Transfers – Query Screen A2A Copy of the pacs.004 and copy of the pacs.002 if requested.
Relevant Documentation	RTGS UDFS 12.4.2 PaymentReturn (pacs.004)

	RTGS UHB 5.7.5 Cash Transfer Order Subtotals by Status – List Screen
Related privileges	RTGS Initiate Payment Return
Related roles	For CBs • CB RTGS Manager - 2E/4E For AH • AH RTGS Payment Manager 2E/4E

T2_TC_RTGS_AH_ID11 - Receive Payment Return pacs.004

Test Case ID	T2_TC_RTGS_AH_ID11
Test case name	Receive Payment Return pacs.004
Relevant for	RTGS Account Holders
Domain	RTGS
Sub Domain	CTO
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	The objective of this test case is for participant A to verify that its account is credited
Preconditions/Details	A payment order was initiated by participant A A PaymentReturn pacs.004 message was initiated by participant B
Expected results	Participant A is credited and receives the pacs.004 message
Test evidence	U2A Screenshot of the Payment status in the Cash Transfers and Messages → Cash Transfers – Query from the counter party or a screenshot of the received pacs.004 message from 'Messages – List Screen' or 'Messages – Details Screen' A2A Copy of the received pacs.004 message by the counterparty
Relevant Documentation	RTGS UDFS 12.4.2 PaymentReturn (pacs.004) RTGS UHB 5.7.5 Cash Transfer Order Subtotals by Status – List Screen

Related privileges	RTGS Query Message RTGS Query Message Details
Related roles	For CBs • CB RTGS reader - 2E For AH • AH RTGS Reader 2E

T2_TC_RTGS_AH_ID12 – RTGS - Create and Receive Statement of account

Test Case ID	T2_TC_RTGS_AH_ID12
Test case name	RTGS - Create and receive Statement of account
Relevant for	RTGS Account holders
Domain	CRDM, RTGS
Sub Domain	CRDM GUI, STA
Input mode	U2A or A2A
Mandatory	Yes
Detailed Description	For the account statement creation in RTGS, a Report Configuration must be created or updated by the CRDM Actor at the latest 1 business day before the first generation of the Statement of account. The Report Configuration triggers the generation of the Statement of account report based on the reference data configuration. The Statement of account" is provided during the EoD processing. The report provides information about all items that are posted on a cash account and balance information of the prior business day. A. <u>Creation of a Report Configuration (and therefore statements of accounts):</u> In CRDM GUI, 1. Go to the report configuration – new/edit screen: Common >> Messages and Reports >> Report Configurations >> New. The report configuration – new screen is displayed.2. Enter all mandatory information about the report configuration you want to create. Select 'Service' T2 RTGS COMPONENT, Report Name 'RTGS Statement of Accounts', Event Type 'RCOS – Close of Service', select 'Push Mode'(Yes for A2A participants, No for U2A-Only partcipants),

	Validity from per example 'Todays's Date' Validity to '9999-12-31' (suggestion) B. <u>Reception of a RTGS Statement of account</u> The RTGS account holder verifies and confirm the receipt of the Statement of account
Preconditions/Details	The user has the required privileges to use the CRDM GUI screen, and RTGS GUI screen (for U2A) The participant has instructed and/or received cash transfers during the day covered by the statement of account
Expected results	The report configuration has been successfully updated or created. During the EoD (within the validity period of the report configuration), the report generation is triggered. <u>A2A:</u> The participant receives the camt.053 message (related to the report configuration created in this test case) received at EoD. <u>U2A:</u> The RTGS account holder can download the statement of account (related to the report configuration created in this test case) from the RTGS GUI.
Test evidence	Statement of accounts is received at EoD by the RTGS actor. The account must align to the parameters in the subscription. U2A: • Screenshot of the report configuration parameters • Copy of the Statement of account (related to the report configuration updated or created in this test case) downloaded in the RTGS GUI (from the screen Cash Transfers and Messages → Download Statement of Account) <u>A2A:</u> • copy of camt.053 received and screenshot of the report configuration parameters
Relevant Documentation	RTGS UDFS 5.6.2 RTGS report generation CRDM UHB 3.6.1 Report Management CRDM UDFS 1.3.7 Report Configuration

Related privileges	Report configuration list query Create Report Configuration Update Report Configuration RTGS Query Account Statement RTGS Download Statement of Account
Related roles	For CBs • CB RTGS reader - 2E • CB National Service Desk (NCB) -2E/4E For AH • AH CRDM Configuration Manager -2E/4E • AH CRDM Reader - 2E

2.4 Ancillary Systems

T2_TC_AS_ID1 - AS settlement procedure A

Test Case ID	T2_TC_AS_ID1
Test case name	AS settlement procedure A
Relevant for	AS
Domain	RTGS
Sub Domain	ASP-A
Input mode	A2A
Mandatory	Conditional Required for AS using settlement procedure A
Detailed Description	Procedure A: Debits First This test describes procedure A whereby an Ancillary System, allowed to use procedure A, sends an AS TransferInitiation pain.998 with all multilateral balances to be debited and credited on the AS settlement banks' RTGS DCAs/RTGS CB Accounts. RTGS settles all debits before settling the credits.
Preconditions/Details	- Business validations, blocked accounts, information period are validated positively and /or applied correctly. - If subscribed to this message, the payment bank or CB will receive a camt.054 - the usage of the AS technical account is mandatory
Expected results	All individual orders are settled against the technical account of the AS RTGS processes all credits. The AS settlement banks are informed via a credit notification (BankToCustomerDebitCreditNotification (camt.054) on an optional basis. After all AS transfers have been settled the ancillary system (or the relevant CB on its behalf) receives a notification (ASInitiationStatus(pain.998, confirming the settlement of the entire AS batch message.
Test evidence	AS: copy of the pain.998 ASInitiationStatus

Relevant Documentation	RTGS UDFS 5.4.2 AS settlement procedure A 12.5.3 ASTransferInitiation (pain.998) RTGS UHB 5.4 Ancillary System 6.4.11 Revoke AS batch 6.4.12 Release AS batch / AS transfer order of blocked party
Related privileges	RTGS Query AS Batches RTGS send new AS transfer Initiatiation
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E

T2_TC_AS_ID2 - AS settlement procedure B

Test Case ID	T2_TC_AS_ID2
Test case name	AS settlement procedure B
Relevant for	AS
Domain	RTGS
Sub Domain	ASP-B
Input mode	A2A
Mandatory	Conditional Required for AS using settlement procedure B
Detailed Description	Procedure B: All or nothing This test describes procedure B whereby an ancillary system sends to RTGS both debit and credit AS transfer orders for settlement. RTGS settles all debit and credit AS transfer orders simultaneously if possible. No settlement takes place when simultaneous settlement of all debit and credit AS transfer orders is not possible. Steps: 1. An Ancillary System, allowed to use procedure B, sends an AS TransferInitiation pain.998 with all multilateral balances to be debited and credited on the AS settlement banks' RTGS DCAs/RTGS CB

	Accounts
Preconditions/Details	Business validations, blocked accounts, information period are validated positively and /or applied correctly. If subscribed to this message, the payment bank or CB will receive a camt.054 The usage of the AS technical account is mandatory
Expected results	All individual orders are settled against the technical account of the AS RTGS processes all debits/credits. The AS settlement banks are informed via a credit or debit notification (BankToCustomerDebitCreditNotification (camt.054) on an optional basis. After all AS transfers have been settled the ancillary system (or the relevant CB on its behalf) receives a notification (ASInitiationStatus(pain.998, confirming the settlement of the entire AS batch message.
Test evidence	AS: copy of the pain.998 ASInitiationStatus
Relevant Documentation	RTGS UDFS 5.4.3 AS settlement procedure B 12.5.3 ASTransferInitiation (pain.998) RTGS UHB 5.4 Ancillary System 6.4.11 Revoke AS batch 6.4.12 Release AS batch / AS transfer order of blocked party
Related privileges	RTGS Send new AS Transfer Initiation
Related roles	For CBs • CB RTGS Manager - 2E/4E

T2_TC_AS_ID3 - AS settlement procedure C

Test Case ID	T2_TC_AS_ID3
Test case name	AS settlement procedure C
Relevant for	AS
Domain	RTGS

Sub Domain	ASP-C
Input mode	A2A
Mandatory	Conditional Required for AS using settlement procedure C
Detailed Description	Procedure C: Transfer order on sub-accounts: This test describes the AS settlement procedure C whereby an AS settlement bank dedicates liquidity for the settlement of AS transfer orders from a specific ancillary system. They achieve this by allocating the needed liquidity to a specific sub-account. AS settlement procedure C uses a mandatory procedure (triggered by RTGS event ""Execution of standing orders in RTGS" of new business day) and allows ancillary systems to execute optional procedure(s) (the ancillary system or CB on behalf sends a message (ReturnGeneralBusinessInformation (camt.021)) indicating the start of the optional procedure.
Preconditions/Details	One or more sub-accounts created by AS settlement bank Required liquidity allocated to sub-account The AS has an AS technical account
Expected results	All individual orders are settled against the technical account of the AS RTGS processes all credits. The AS settlement banks are informed via a credit notification (BankToCustomerDebitCreditNotification (camt.054) on an optional basis. After all AS transfers have been settled the ancillary system (or the relevant CB on its behalf) receives a notification (ASInitiationStatus(pain.998, confirming the settlement of the entire AS batch message.
Test evidence	AS: copy of the pain.998 ASInitiationStatus
Relevant Documentation	RTGS UDFS 5.4.4.1 AS settlement procedure C 12.5.3 ASTransferInitiation (pain.998) RTGS UHB 5.4 Ancillary System
Related privileges	RTGS Send new AS Transfer Initiation RTGS Ancillary System Procedure C – Start/End of Cycle (ReturnGeneralBusinessInformation) RTGS Initiate immediate Liquidity Transfer

Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E

T2_TC_AS_ID4 - AS settlement procedure D

Test Case ID	T2_TC_AS_ID4
Test case name	AS settlement procedure D
Relevant for	AS
Domain	RTGS
Sub Domain	ASP-D
Input mode	A2A
Mandatory	Conditional Required for AS using settlement procedure D
Detailed Description	Procedure D: Transfer Orders on a Technical Account This AS settlement procedure allows an AS settlement bank to dedicate liquidity for the settlement of a specific ancillary system. The AS settlement bank achieves this by allocating the needed liquidity to the respective AS technical account. AS settlement procedure D uses the mandatory procedure (triggered by RTGS event ""Execution of standing orders in RTGS" of new business day). This procedure is meant for the AS which are responsible for real time settlement (i.e. instant payments).
Preconditions/Details	The AS has an AS technical account
Expected results	After all AS transfers have been settled the ancillary system (or the relevant CB on its behalf) receives a notification ASInitiationStatus (pain.998), confirming the settlement of the entire AS batch message.
Test evidence	AS: copy of the pain.998 ASInitiationStatus
Relevant Documentation	RTGS UDFS 5.4.4.2 AS settlement procedure D 12.5.3 ASTransferInitiation (pain.998) RTGS UHB 5.4 Ancillary System 5.4.15 Linked AS Technical Accounts Procedure D – Query Screen

	5.4.17 Liquidity Transfer to Technical Account Procedure D – New Screen
Related privileges	RTGS Send new AS Transfer Initiation RTGS Liquidity Adjustment (Ancillary System Settlement Procedure D)
Related roles	For CBs • CB RTGS reader - 2E • CB RTGS Manager - 2E/4E

T2_TC_AS_ID5 - AS settlement procedure E

Test Case ID	T2_TC_AS_ID5
Test case name	AS settlement procedure E
Relevant for	AS
Domain	RTGS
Sub Domain	ASP-E
Input mode	A2A
Mandatory	Conditional Required for AS using settlement procedure E
Detailed Description	Procedure E: Bilateral settlement With the AS settlement procedure E, Ancillary systems can benefit of the bilateral settlement of simultaneously sent debits and credits that shall be processed independently from each other. 1. An Ancillary System sends a pain.998_TransferInitiation message which passes the technical validation.
Preconditions/Details	An Ancillary System, with proper privileges and using procedure E, has sent a pain.998_TransferInitiation message which has passed the technical validation All accounts belong to the same Settlement Bank Account Group. Appropriate subscription for camt.054 was set up by at least one Settlement Bank RTGS UDFS (section 5.4.5) *it is recommended to use a dedicated technical account for procedure E for segregation purposes.*
Expected results	The pain.998_TransferInitiation message passes the business validation and it is submitted to settlement. During the process "Perform standard RTGS settlement" the AS transfer

	order is settled so the AS receives single notifications pain_998_ASInitiationStatus (AS transfer order settlement notification) Group Status=ASCD. Credited/Debited Settlement Banks receive a camt.054 BankToCustomerDebitCreditNotification message (local instrument ASTI) when opting for them
Test evidence	AS: copy of the pain.998 ASInitiationStatus
Relevant Documentation	RTGS UDFS 5.4.5 AS settlement procedure E RTGS UHB 5.4 Ancillary System
Related privileges	RTGS Send new AS Transfer Initiation
Related roles	For CBs • CB RTGS Manager - 2E/4E