T2-T2S CONSOLIDATION

USER REQUIREMENTS DOCUMENT

FOR

T2 - CENTRAL LIQUIDITY MANAGEMENT (CLM)

COMPONENT CENTRAL LIQUIDITY MANAGEMENT
(CLM)

-ANNEX FOR CENTRAL BANKS ONLY-

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Contents

1 (CENTRAL LIQUIDITY MANAGEMENT (CLM)	4
1.1	Overview	4
1.1.1	Context Diagram	4
1.1.2	Business Processes	
1.2	Modify Credit Line	5
1.2.1	Business Process Model	5
1.2.2	Process Overview	6
1.2.3	User Requirements	7
1.3	Connected Payment Processing	15
1.3.1	Business Process Model	15
1.3.2	Process Overview	
1.3.3	User Requirements	17
1.4	Production of CLM End of Day general ledger files	22
1.4.1	Business Process Model	22
1.4.2	Process Overview	23
1.4.3	User Requirements	23
2 (CENTRAL BANK SERVICES (CBS)	25
2.1	Overview	25
2.1.1	Context Diagram	25
2.1.2	Business Processes	26
2.2	Set up Overnight Deposit	27
2.2.1	Business Process Model	27
2.2.2	Process Overview	28
2.2.3	User Requirements	29
2.3	Overnight Deposit Reverse Transaction	33
2.3.1	Business Process Model	33
2.3.2	Process Overview	34
2.3.3	User Requirements	35
2.4	Overnight Deposit Reimbursement and Interest Calculation	39
2.4.1	Business Process Model	39
2.4.2	Process Overview	40
2.4.3	User Requirements	41
2.5	Set up Marginal Lending on Request	45
2.5.1	Business Process Model	45



-Annex-	ECB-PUBLIC
2.5.2	Process Overview
2.5.3	User Requirements
2.6	Process Automatic Marginal Lending 52
2.6.1	Business Process Model52
2.6.2	Process Overview
2.6.3	User Requirements
2.7	Marginal Lending Reimbursement and Interest Calculation 57
2.7.1	Business Process Model57
2.7.2	Process Overview
2.7.3	User Requirements
2.8	Collect End of Day general ledger files from settlement services 62
2.8.1	Business Process Model
2.8.2	Process Overview
2.8.3	User Requirements 64
2.9	Input Minimum Reserve Requirement67
2.9.1	Business Process Model
2.9.2	Process Overview
2.9.3	User Requirements
2.10	Minimum Reserve and Excess Reserve Management72
2.10.1	Business Process Model72
2.10.2	Process Overview73
2.10.3	User Requirements
3 U	SER INTERACTION78
3.1	General User Requirements for User Interaction
3.1.1	Query
3.1.2	Action
3.2	User Interaction for Central Bank Services79
3.2.1	Query
3.2.2	Action
3.3	User Interaction for Central Liquidity Management85
3.3.1	Query
3.3.2	Action
4 B	USINESS DATA DEFINITIONS91
4.1	Attributes and Entities91
7.1	Attibutes and Littles

1 CENTRAL LIQUIDITY MANAGEMENT (CLM)

1.1 OVERVIEW

1.1.1 Context Diagram

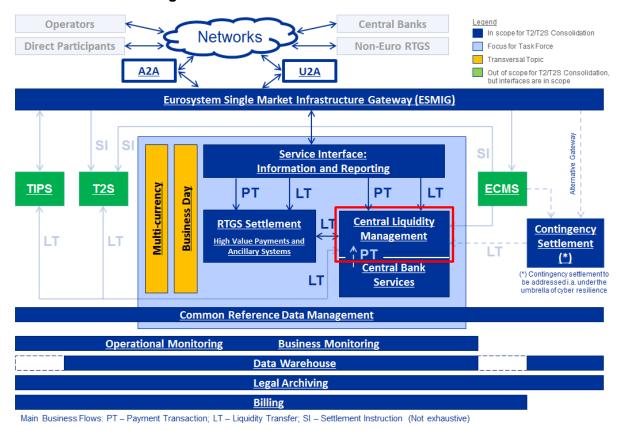


Figure 1: Context diagram for Central Liquidity Management

1.1.2 Business Processes

Business Process	BP Reference	Business Process Description
Modify Credit Line	CLM.CB.BP.CLM.MCL	This business process describes how the update of the credit line shall be handled in CLM.
Connected Payment Processing	CLM.CB.BP.CLM.CP	This business process describes how a connected payment order shall be processed within CLM.
Production of CLM End of Day general ledger files	CLM.CB.BP.CLM.GL	This business process describes how the CLM End of Day files for general ledger shall be built and generated.

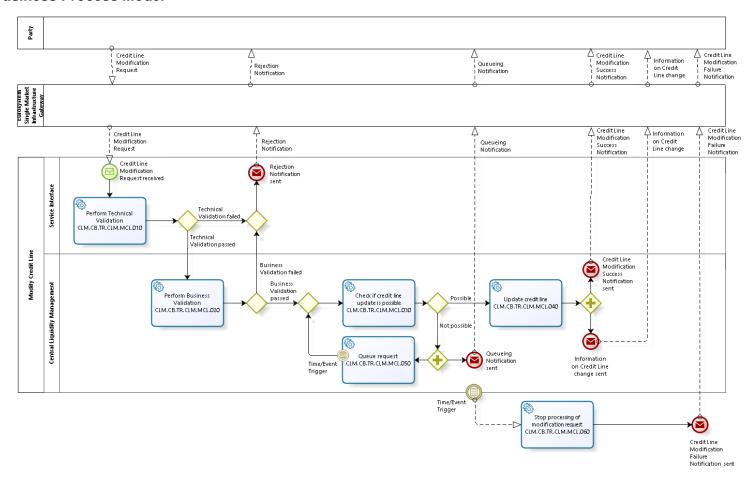
Table 1: Business Processes for Central Liquidity Management



1.2 MODIFY CREDIT LINE

Business Process Ref: CLM.CB.BP.CLM.MCL

1.2.1 Business Process Model



Business Process Model 1: Modify Credit Line



1.2.2 Process Overview

Process goal:

This process describes how the update of the credit line will be handled in CLM. The credit line is the maximum collateralised overdraft position of the balance on the Main Cash Account (MCA) on CLM.

Process context:

Changes to the credit line shall not be possible between the CB general cut-off for the use of Standing Facilities (i.e. 18:40) and the start of the provisioning of liquidity for the new business day (i.e. 19:00), as well as during the maintenance window.

Pre-conditions:

The credit line update can only take place if the MCA is active.

Time constraints:

The CLM opening hours and the End of Day processing shall dictate the opening hours for credit line modification.

Expected results:

If the credit line modification order is valid, the credit line update shall be executed immediately.

In case of a reduction of a credit line, this change shall have a "pending" status if the reduction would lead to an uncovered overdraft position. The change will be executed when the overdraft position is covered by the reduced credit line.

Triggers:

Credit line changes can be initiated through:

- ▶ A modification order sent by the CB's collateral management system; or
- Manual update via U2A screen by the CB in charge.



1.2.3 User Requirements

1.2.3.1 GENERAL USER REQUIREMENTS FOR MODIFY CREDIT LINE

ld	CLM.CB.UR.CLM.MCL.000.010
Name	Type of credit line updates
Description	CLM shall allow both:
	 Fixed amount credit line updates (update contains the new value of the credit line in absolute figure); and
	Delta amount credit line updates (update contains the delta between the new and the old credit line value).

ld	CLM.CB.UR.CLM.MCL.000.020
Name	Settlement principles for credit line updates
Description	The following principles shall apply for credit line updates:
	 Credit line updates shall be handled with the highest priority. There is therefore no need to indicate a priority in the credit line modification requests;
	Whether the credit line update is possible, shall be checked immediately after its submission;
	Credit line modification requests may be pending;
	 Credit line modification requests may be replaced (i.e. processing stopped upon receipt of a new credit line modification request) as long as they are not executed (i.e. they are pending); and
	Credit line updates shall be continuously attempted to process whenever new funds are credited to the involved account.



1.2.3.2 Perform Technical Validation

Task Ref: CLM.CB.TR.CLM.MCL.010

The credit lines in CLM shall be updated by the CB in charge by sending a credit line modification order from the relevant collateral management system or through a manual update via U2A screen.

At the reception of a credit line modification request, the <u>componentservice</u> interface shall complete technical validation by performing checks such as field level validation (fields have correct data type and size) and for duplicate messages.

ld	CLM.CB.UR.CLM.MCL.010.010
Name	Check mandatory fields
Description	The service component interface shall ensure that all mandatory fields in the message received are populated.

ld	CLM.CB.UR.CLM.MCL.010.020
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the service component interface shall continue to validate as far as possible and report all negative results together in a single message. The service component interface shall reject the order only after performing all possible technical validations.

ld	CLM.CB.UR.CLM.MCL.010.030
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the order shall be sent to CLM for further processing.



ld	CLM.CB.UR.CLM.MCL.010.040
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing collateral management system.
	In case of a manual input via the U2A screen, the <u>error messagerejection</u> notification shall be displayed directly on the screen with the relevant error code(s).

1.2.3.3 Perform Business Validation

Task Ref: CLM.CB.TR.CLM.MCL.020

In case of a positive result of the technical validation of the credit line modification request, CLM shall validate the message received against the reference data and perform additional checks/validations.

ld	CLM.CB.UR.CLM.MCL.020.010
Name	Authorisation check
Description	CLM shall check that only authorised collateral management systems or CB operators (in case of manual update) are allowed to send a credit line modification request.

ld	CLM.CB.UR.CLM.MCL.020.020	
Name	Business validation of the values	
Description	CLM shall check that all provided values are valid according to predefined values or cross-field validations.	
	As of ECMS launch, there is a need to do a value date check. CLM shall check that the value date specified in the credit line modification request matches with the current business day.	



ld	CLM.CB.UR.CLM.MCL.020.030
Name	Processing in case of failed business validation
Description	In case of a negative result of the business validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing collateral management system.
	In case of a manual input via the U2A screen, the <u>error messagerejection</u> notification shall be displayed directly on the screen with the relevant error code(s).

1.2.3.4 CHECK IF CREDIT LINE UPDATE IS POSSIBLE

Task Ref: CLM.CB.TR.CLM.MCL.030

In case of a positive result of the business validation of the credit line modification request, CLM shall check if the credit line update is possible.

Id	CLM.CB.UR.CLM.MCL.030.010
Name	Check for pending credit line modification request
Description	When a credit line modification request (for a credit line decrease) is pending for a fixed amount, CLM shall reject this pending instruction in case it receives a new credit line modification request (fixed or delta).
	It shall be possible to have several credit line modification requests for delta amounts pending in parallel, but all pending credit line modification requests for delta amounts for one account shall be rejected if a fixed amount request is submitted.

ld	CLM.CB.UR.CLM.MCL.030.020
Name	Processing of credit line decrease
Description	If a credit line is in use, requests to decrease the credit line shall remain pending in the event of insufficient available liquidity to cover the change in the credit line.



Id	CLM.CB.UR.CLM.MCL.030.030
Name	Inform about pending status
Description	CLM shall inform the instructing collateral management system about the pending status of the credit line modification requests. In case of a manual update of the credit line via the U2A screen, the notification shall be displayed directly on the screen.

1.2.3.5 UPDATE CREDIT LINE

Task Ref: CLM.CB.TR.CLM.MCL.040

If the update of the credit line is possible, CLM shall perform the update of the credit line and inform the instructing collateral management system about the positive result of the update.

Id	CLM.CB.UR.CLM.MCL.040.010
Name	Execution of credit line update
Description	Updates of credit lines shall be executed immediately and the credit line shall be processed according to the update type indicated in the request, i.e. fixed amount or delta amount.

ld	CLM.CB.UR.CLM.MCL.040.020
Name	Priority of credit line modification request
Description	If the update of the credit line is not possible, the request shall be queued. A pending reduction of credit line should block all upcoming debits if the liquidity on the account is not sufficient.



Ial	CLM OD LID CLM MOL 040 000
ld	CLM.CB.UR.CLM.MCL.040.030
Name	Update notification
Description	A notification of execution shall be sent to the instructing collateral management system (as of the go-live of ECMS).
	In case of a manual input via the U2A screen, the notification shall be displayed directly on the screen.
	Moreover, CLM <u>account holdersparticipants</u> shall be able to get information about their credit line changes (U2A and A2A).

1.2.3.6 QUEUE REQUEST

Task Ref: CLM.CB.TR.CLM.MCL.050

If the update of the credit line is not possible, CLM shall queue the credit line modification request.

ld	CLM.CB.UR.CLM.MCL.050.010
Name	Processing of a pending credit line modification request
Description	There shall be continuous attempts to process queued credit line modification requests whenever new funds are credited to the involved account.



Automatic trigger of liquidity transfer between RTGS DCA and MCA n case there is insufficient liquidity on the CLM account holder'sparticipant's MCA to settle a credit line modification request, CLM shall automatically rigger an inter-service liquidity transfer order with the missing amount from the CLM account holder's participant's RTGS DCA defined for payments to the same CLM account holder'sparticipant's MCA. The respective automated
n case there is insufficient liquidity on the CLM <u>account holder's participant's</u> MCA to settle a credit line modification request, CLM shall automatically rigger an inter-service liquidity transfer <u>order</u> with the missing amount from the CLM <u>account holder's participant's</u> RTGS DCA defined for payments to
MCA to settle a credit line modification request, CLM shall automatically rigger an inter-service liquidity transfer order with the missing amount from the CLM account holder's participant's RTGS DCA defined for payments to
requidity transfer order shall be placed on top of the queue of all pending payment orders and liquidity transfer orders on the RTGS DCA. If only a partial settlement of the automated liquidity transfer order is possible, then CLM shall execute the liquidity transfer order in the amount as confirmed by RTGS. and RTGS shall create a new automated liquidity transfer order for the remaining part that shall be queued in the RTGS-settlement service until it can be entirely processed. If the pending credit line decrease can be fully settled with the incoming iquidity stemming from other sources than the inter-service liquidity transfer order previously automatically triggered, CLM shall cancel the pending interservice liquidity transfer order towards RTGS. Any change in the liquidity required to process a pending credit line decrease
on the MCA, shall lead to a creation and sending of a new inter-service iquidity transfer order with a new total (decreased or increased) amount to RTGS which replaces the existing pending inter-service liquidity transfer order. In case the change in liquidity on the MCA stems from incoming liquidity from RTGS due to the partial or full execution of the inter-service liquidity transfer order previously automatically triggered, no new inter-service liquidity transfer order with new adapted amount is sent to RTGS.
of the of the original origin



1.2.3.7 STOP PROCESSING OF MODIFICATION REQUEST

Task Ref: CLM.CB.TR.CLM.MCL.060

Id	CLM.CB.UR.CLM.MCL.060.010
Name	Rejection of a pending credit line modification request for a fixed amount
Description	A pending credit line modification request for a fixed amount shall be automatically rejected by CLM in case it:
	 Receives a new credit line modification request (fixed or delta); or Is still pending by the start of End of Day processing.

ld	CLM.CB.UR.CLM.MCL.060.020
Name	Rejection of a pending credit line modification request for a delta amount
Description	A pending credit line modification request for a delta amount shall be automatically rejected by CLM in case it:
	 Receives a new credit line modification request (only fixed); or Is still pending by the start of End of Day processing.

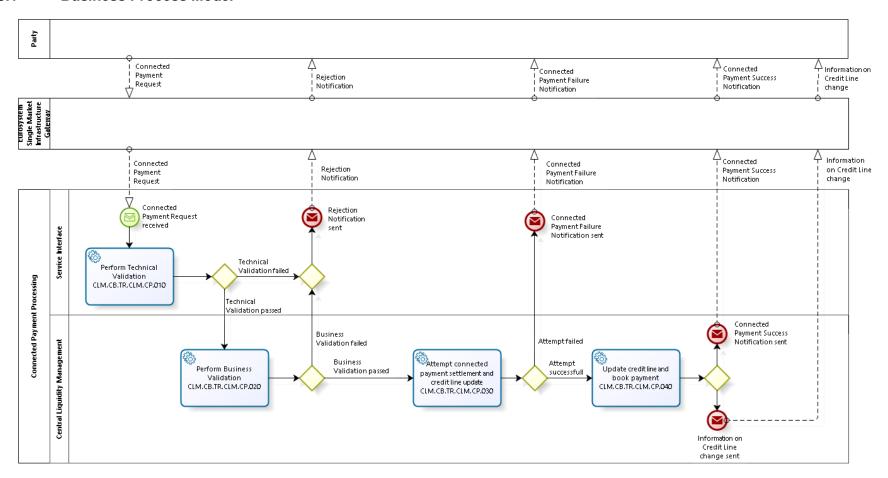
ld	CLM.CB.UR.CLM.MCL.060.030
Name	Rejection notification
Description	A notification message per rejected request shall be sent to the instructing collateral management system (as of the go-live of ECMS) with the relevant error code(s). In case of a manual update via the U2A screen, the error messagenetification shall be displayed directly on the screen with the relevant error code(s).



1.3 CONNECTED PAYMENT PROCESSING

Business Process Ref: CLM.CB.BP.CLM.CP

1.3.1 Business Process Model



Business Process Model 2: Connected Payment Processing



1.3.2 Process Overview

Process goal:

This process describes how a connected payment <u>order</u> (i.e. payment <u>order</u>s that trigger a change in the credit line of this <u>CLM account holderparticipant</u> and an immediate debit/credit of its account to compensate the change in this credit line) shall be processed within CLM.

Pre-conditions:

A Party involved in a connected payment <u>order</u> with its CB needs to be a CLM <u>account</u> holderparticipant and have an MCA.

Time constraints:

The processing of connected payment <u>orders</u> shall not be possible between the CB general cut-off for the use of Standing Facilities (i.e. 18:40) and the start of the provisioning of liquidity for the new business day (i.e. 19:00), as well as during the maintenance window.

Expected results:

The connected payment <u>order</u> shall lead to the increase/decrease of a CLM <u>account holder's</u> <u>participant's</u> credit line at the same time as a payment <u>order</u> is executed between the CLM <u>account holder's participant's</u> MCA and a CB account. The connected payment <u>order</u> should be processed "all or nothing" - either both the credit line update and the payment <u>order</u> are executed or none of the two.

Triggers:

Connected payment <u>orders</u> can be initiated through a connected payment request sent by the respective CB system.



1.3.3 User Requirements

1.3.3.1 GENERAL USER REQUIREMENTS FOR CONNECTED PAYMENT ORDER PROCESSING

ld	CLM.CB.UR.CLM.CP.000.010
Name	Settlement principles for connected payment orders
Description	The following principles shall apply for connected payment orders:
	 Connected payment <u>orders</u> shall be handled with the highest priority;
	 Attempt to settle connected payment <u>orderrequest</u> immediately after its submission;
	 Two different connected payment <u>order</u> settlement scenarios are possible: full and
	- no execution (i.e. no queuing);
	 The connected payment <u>order</u> should be processed "all or nothing" - either both the credit line update and the payment <u>order</u> are executed or none of the two; and
	 Connected payment <u>ordersrequests</u> cannot be <u>cancelledrevoked</u> as there is no queuing.

1.3.3.2 Perform Technical Validation

Task Ref: CLM.CB.TR.CLM.CP.010

At the reception of a connected payment request, the <u>componentservice</u> interface shall complete technical validation by performing checks such as field level validation (fields shall have correct data type and size) and for duplicate messages.

ld	CLM.CB.UR.CLM.CP.010.010
Name	Check mandatory fields
Description	The <u>componentservice</u> interface shall ensure that all mandatory fields in the message received are populated.

ld	CLM.CB.UR.CLM.CP.010.020
Name	Check for duplicate message
Description	The <u>component</u> service interface shall ensure that the same message has not already been received.



ld	CLM.CB.UR.CLM.CP.010.030
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the <u>componentservice</u> interface shall continue to validate as far as possible and report all negative results together in a single message. The <u>componentservice</u> interface shall reject the order only after performing all possible technical validations.

ld	CLM.CB.UR.CLM.CP.010.040
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the order shall be sent to CLM for further processing.

ld	CLM.CB.UR.CLM.CP.010.050
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.

1.3.3.3 Perform Business Validation

Task Ref: CLM.CB.TR.CLM.CP.020

In case of a positive result of the technical validation of the connected payment request, CLM shall validate the message received against the reference data and perform additional checks/validations.

ld	CLM.CB.UR.CLM.CP.020.010
Name	Authorisation check
Description	CLM shall check that the instructing CB system is allowed to instruct a connected payment <u>order</u> on the relevant CLM <u>account holder'sparticipant</u> MCA.



ld	CLM.CB.UR.CLM.CP.020.020
Name	Business validation of the values
Description	CLM shall check that all provided values are valid according to predefined values or cross-field validations.

ld	CLM.CB.UR.CLM.CP.020.030
Name	Account check
Description	CLM shall check that the MCA and the CB account mentioned in the payment order exist and are active for settlement in the relevant currency. Moreover, CLM shall also check that the CLM account holder of the MCA is not blocked at Party level.

Id	CLM.CB.UR.CLM.CP.020.040
Name	Processing in case of failed business validation
Description	In case of a negative result of the business validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.



1.3.3.4 ATTEMPT CONNECTED PAYMENT SETTLEMENT AND CREDIT LINE UPDATE

Task Ref: CLM.CB.TR.CLM.CP.030

In case of a positive result of the business validation checks, CLM shall check whether the concurrent booking of the payment <u>order</u> and the credit line update are feasible. Two different scenarios are possible: full and no execution.

ld	CLM.CB.UR.CLM.CP.030.010
Name	Principles for the processing of a connected payment order
Description	CLM shall apply the following principles when checking if the processing of a connected payment <u>order</u> is feasible:
	 The successful booking of the payment <u>order</u> shall take place concurrently with the update of the credit line;
	 The credit line part of the connected payment request is treated equally to a delta amount credit line modification request;
	 A connected payment <u>orderrequest</u> shall never be queued; in case of insufficient available liquidity on MCA, this payment <u>ordertype</u> shall immediately be rejected; and
	CLM shall reject connected payment requests immediately if they
	 cannot settle due to lack of available liquidity on MCA; and
	 would decrease the liquidity on MCA, but there are already pending delta amount credit line modification requests for the same MCA.

ld	CLM.CB.UR.CLM.CP.030.020
Name	Send rejection notification
Description	In case of rejection of the connected payment order, CLM shall send a notification to the instructing CB system with the relevant error code(s).



1.3.3.5 UPDATE CREDIT LINE AND BOOK PAYMENT

Task Ref: CLM.CB.TR.CLM.CP.040

ld	CLM.CB.UR.CLM.CP.040.010
Name	Booking of payment order and credit line update
Description	If the settlement of the connected payment order is possible, CLM shall: Book the payment order (by debiting the CLM account holder's participant's MCA and crediting the CB account) and simultaneously increase the credit line by the amounts indicated in the connected payment order; or
	Book the payment order (by crediting the CLM account holder's participant's MCA and debiting the CB account) and simultaneously decrease the credit line by the amounts indicated in the connected payment order. The payment order amount may differ from the credit line update amount.

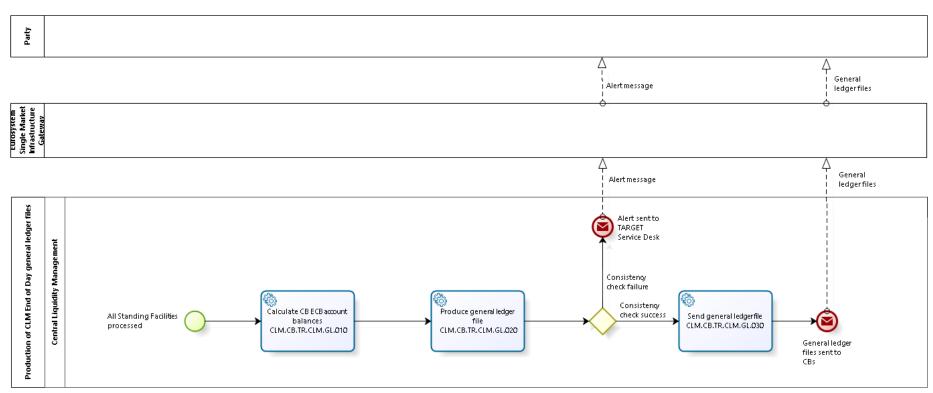
Id	CLM.CB.UR.CLM.CP.040.020
Name	Send confirmation notification
Description	Once the payment <u>order</u> is booked and the credit line is updated, CLM shall send a confirmation notification to the instructing CB system. Moreover, CLM <u>account holdersparticipants</u> shall be able to get information about their credit line changes (U2A and A2A).



1.4 PRODUCTION OF CLM END OF DAY GENERAL LEDGER FILES

Business Process Ref: CLM.CB.BP.CLM.GL

1.4.1 Business Process Model



Business Process Model 3: Production of CLM End of Day general ledger files



1.4.2 Process Overview

Process goal:

This process describes how the CLM End of Day general ledger files shall be produced.

Pre-conditions:

CBS has received the End of Day general ledger files from other settlement services (e.g. RTGS, T2S, TIPS). See <u>section 2.8 on Collect End of Day general ledger files from settlement services in this User Requirements Document for business process CLM.CB.BP.CBS.CEODB (section 2.8 of this URD).</u>

Time constraints:

The CLM general ledger files shall be produced <u>during the End of Day processing</u> after the settlement of Standing Facilities.

Expected results:

After preparing the CLM general ledger files, CLM shall forward them to CBS that will then send all general ledger files to the respective CBs.

Triggers:

The production of the CLM general ledger file shall be triggered once all the End of Day general ledger files have been received from the other settlement services.

1.4.3 User Requirements

1.4.3.1 CALCULATE CB ECB ACCOUNT BALANCES

Task Ref: CLM.CB.TR.CLM.GL.010

Once all End of Day general ledger files have been received from the other settlement services, CLM shall start to calculate the CB ECB account balances.

ld	CLM.CB.UR.CLM.GL.010.010
Name	Calculate CB ECB account balances
Description	Based on the End of Day general ledger files from other settlement services received by CBS, CLM shall calculate for each CB the starting and End of Day balance of the CB's ECB account.

1.4.3.2 PRODUCE GENERAL LEDGER FILE

Task Ref: CLM.CB.TR.CLM.GL.020



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Once the CB ECB account balances have been calculated, CLM shall produce the CLM general ledger files.

ld	CLM.CB.UR.CLM.GL.020.010
Name	Number of CLM general ledger files to be produced
Description	CLM shall produce one general ledger file per CB that shall include for each CB:
	 Starting and End of Day balance of the CB's ECB account; Starting and End of Day balance of the accounts in CLM; and Turnover on accounts in CLM.

ld	CLM.CB.UR.CLM.GL.020.020
Name	Consistency checks
Description	CLM shall perform consistency checks for each general ledger file:
	Dedicated Transit Accounts check between the various settlement services;
	Single balance checks per account: Each published balance at the end of the day is checked by adding up the account turnovers with the balance at the start of the day per each published account; and
	Final balance check of all accounts of the responsible CB: All published End of Day balances shall be added up. The result must be zero.
	In case of an error, the End of Day processing and the transmittance of the
	general ledger files to CBS shall be stopped. An alert message shall be sent
	to the TARGET Service Desk and the account holderewner of the Dedicated
	Transit Accounts.

1.4.3.3 SEND GENERAL LEDGER FILE

Task Ref: CLM.CB.TR.CLM.GL.030

Once the general ledger files have been produced, CLM shall send them to CBS for further processing.

ld	CLM.CB.UR.CLM.GL.030.010
Name	Format of the file to be sent to CBS
Description	The format to be used shall be a structured ISO message (not a flat file in a XML envelope).

2 CENTRAL BANK SERVICES (CBS)

2.1 OVERVIEW

2.1.1 Context Diagram

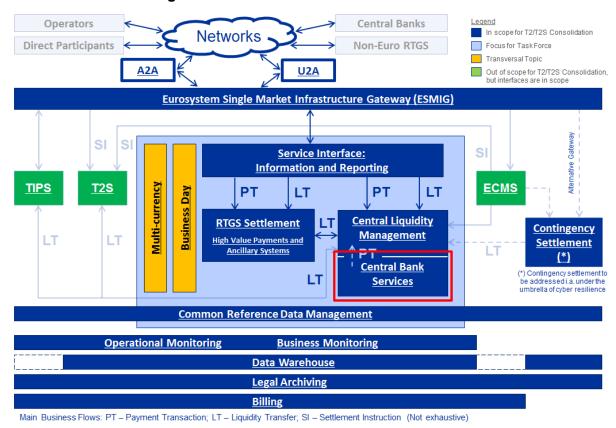


Figure 2: Context diagram for Central Bank Services

2.1.2 Business Processes

Business Process	BP Reference	Business Process Description
Set up Overnight Deposit	CLM.CB.BP.CBS.ODREQ	This business process describes how the setup of an overnight deposit shall be processed within the CBS business domain.
Overnight Deposit Reverse Transaction	CLM.CB.BP.CBS.ODREV	This business process describes how the reverse of an overnight deposit shall be processed within the CBS business domain.
Overnight Deposit Reimbursement and Interest Calculation	CLM.CB.BP.CBS.ODRIC	This business process describes how the refunding and the interest calculation linked to an overnight deposit shall be processed within the CBS business domain.
Set up Marginal Lending on Request	CLM.CB.BP.CBS.MLREQ	This business process describes how the setup of a marginal lending on request shall be processed within the CBS business domain.
Process Automatic Marginal Lending	CLM.CB.BP.CBS.MLAUTO	This business process describes how CBS shall initiate and process an automatic marginal lending.
Marginal Lending Reimbursement and Interest Calculation	CLM.CB.BP.CBS.MLRIC	This business process describes how the reimbursement and the interest calculation linked to a marginal lending on request and automatic marginal lending shall be processed within the CBS business domain.
Collect End of Day general ledger files from settlement services	CLM.CB.BP.CBS.CEODB	This business process describes how CBS shall collect the End of Day general ledger files from the settlement services.
Input Minimum Reserve Requirement	CLM.CB.BP.CBS.IMRR	This business process describes how CBS shall process the minimum reserve requirement input by the CBs.
Minimum Reserve and Excess Reserve Management	CLM.CB.BP.CBS.MRERM	This business process describes how CBS shall perform some functionality for the minimum and excess reserve requirements management.

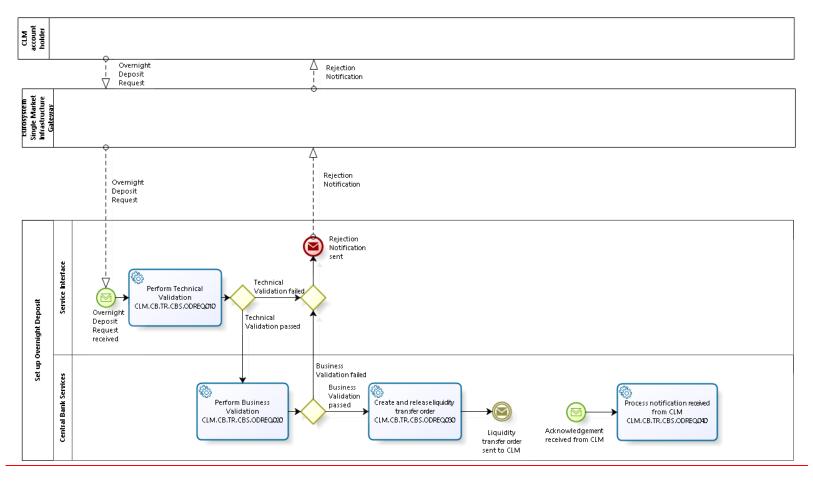
Table 2: Business Processes for Central Bank Services



2.2 SET UP OVERNIGHT DEPOSIT

Business Process Ref: CLM.CB.BP.CBS.ODREQ

2.2.1 Business Process Model



Business Process Model 4: Set up Overnight Deposit



2.2.2 Process Overview

Process goal:

This process describes how the setup of an overnight deposit shall be processed within CBS.

Process context:

CLM <u>account holdersparticipants</u> can use the deposit facility to make overnight deposits with their national CBs.

As to the overnight deposit, CLM <u>account holdersparticipants</u> shall be able to transfer liquidity from their MCA to the relevant overnight deposit account. It shall also be possible to activate the reverse transaction in order to reduce the amount deposited in the overnight deposit account before the deadline for the usage of Standing Facilities. CBS shall then calculate the interest to be paid on the overnight deposit and, at the start of the next business day, return automatically the capital amount and the interest to CLM. In case of a negative interest rate, CBS shall calculate the interest to be paid by the CLM <u>account holdersparticipants</u> on the overnight deposit and, at the start of the next business day, return automatically the capital amount to CLM and debit the interest to be charged from the CLM <u>account holder'sparticipant's</u> MCA.

Pre-conditions:

A Party wishing to initiate an overnight deposit needs to:

- ▶ Be a CLM account holderparticipant;
- ▶ Be eligible to the overnight deposit facility; and
- ► Have an MCA in CLM.

There is a need for dedicated overnight deposit account(s) to be set up in the CLM.

Time constraints:

It shall be possible for CLM <u>account holdersparticipants</u> to set up an overnight deposit from the opening time of CLM (i.e. 19:00 and after overnight deposit and marginal lending reimbursement and interest calculation) until the general cut-off for the use of Standing Facilities (i.e. 18:15 with additional fifteen minutes on the last day of the reserve maintenance period) with the exception of the maintenance window.

Expected results:

The setup of an overnight deposit shall lead to the transfer of liquidity from the CLM <u>account</u> holder'sparticipant's MCA to an overnight deposit account.

Triggers:

The setup of an overnight deposit can be initiated through:



- An overnight deposit request sent by the CLM account holderparticipant in A2A; or
- Manual input via U2A screen by the CLM <u>account holderparticipant</u> (or CB operator acting on behalf of the CLM <u>account holderparticipant</u>).

2.2.3 User Requirements

2.2.3.1 GENERAL USER REQUIREMENTS FOR SET UP OF OVERNIGHT DEPOSIT

Id	CLM.CB.UR.CBS.ODREQ.000.010
Name	Settlement principles for the <u>liquidity transfer</u> payment orders linked to overnight deposits
Description	The following principles shall apply for the processing of <u>liquidity transfer</u> payment orders linked to overnight deposits: Attempt to settle <u>liquidity transfer orderpayment</u> immediately after its submission;
	 Liquidity transfer Payment orders are either settled completely or rejected (no partial settlement), which cannot settle immediately, shall be queued; and Liquidity transfer Payment orders cannot may be queued nor cancelled revoked as long as they are not executed; and.
	Payment orders in the queue shall be processed according to the FIFO-principle.

2.2.3.2 Perform Technical Validation

Task Ref: CLM.CB.TR.CBS.ODREQ.010

At the reception of an overnight deposit request, the <u>componentservice</u> interface shall complete technical validation by performing checks such as field level validation (fields shall have correct data type and size) and for duplicate messages.

Id	CLM.CB.UR.CBS.ODREQ.010.010
Name	Check mandatory fields
Description	The <u>componentservice</u> interface shall ensure that all mandatory fields in the message received are populated.



ld	CLM.CB.UR.CBS.ODREQ.010.020
Name	Check for duplicate message
Description	The <u>componentservice</u> interface shall ensure that the same message has not already been received.

Id	CLM.CB.UR.CBS.ODREQ.010.030
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the <u>componentservice</u> interface shall continue to validate as far as possible and report all negative results together in a single message. The <u>componentservice</u> interface shall reject the order only after performing all possible technical validations.

ld	CLM.CB.UR.CBS.ODREQ.010.040
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the request shall be sent to CBS for further processing.

ld	CLM.CB.UR.CBS.ODREQ.010.050
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CLM account holderparticipant. In case of a manual input via the U2A screen, the error message rejection notification shall be displayed directly on the screen with the relevant error code(s).



2.2.3.3 Perform Business Validation

Task Ref: CLM.CB.TR.CBS.ODREQ.020

In case of a positive result of the technical validation of the overnight deposit request, CBS shall validate the message received against the reference data and perform additional checks/validations.

Id	CLM.CB.UR.CBS.ODREQ.020.010
Name	Authorisation check
Description	CBS shall check that only authorised <u>users of the CLM account</u> <u>holderparticipants</u> are allowed to send an overnight deposit order for the relevant credit institution.

ld	CLM.CB.UR.CBS.ODREQ.020.020
Name	Business validation of the values
Description	CBS shall check that all provided values are valid according to predefined values or cross-field validations.

	ld	CLM.CB.UR.CBS.ODREQ.020.030
	Name	Account check
	Description	CBS shall check that the MCA and the overnight deposit account mentioned
		in the overnight deposit request exist and are active for settlement in the
I		relevant currency. Moreover, CBS shall also check that the CLM account
		holder of the MCA is not blocked at Party level.

ld	CLM.CB.UR.CBS.ODREQ.020.040
Name	Processing in case of failed business validation
Description	In case of a negative result of the business validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CLM account holderparticipant. In case of a manual input via the U2A screen, the rejection notificationerror message shall be displayed directly on the screen with the relevant error code(s).



2.2.3.4 CREATE AND RELEASE <u>LIQUIDITY TRANSFERPAYMENT</u> ORDER

Task Ref: CLM.CB.TR.CBS.ODREQ.030

In case of a positive result of the business validation checks of the overnight deposit request, CBS shall create a liquidity transferpayment order and transfer it to CLM for further processing.

Id	CLM.CB.UR.CBS.ODREQ.030.010
Name	Create and release liquidity transferpayment order
Description	Once the overnight deposit request has successfully passed the business validation checks, CBS shall create and release to CLM a <u>liquidity transfer</u> payment order (direct debit) to transfer the amount indicated in the request from the CLM <u>account holder's participant's MCA</u> to the relevant overnight deposit account.

2.2.3.5 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.ODREQ.040

At the reception of the <u>liquidity transfer payment</u> order <u>(direct debit)</u> sent by CBS, CLM shall process it. The processing of the <u>liquidity transferpayment</u> order in CLM is described in <u>section 1.4 on Process intra-service liquidity transfer order in the User Requirements Document for CLM for the business process CLM.BP.CLM.<u>ISLTPAYT</u> (<u>section 1.6 in URD for CLM</u>). Once processed, CLM shall send an acknowledgement to CBS.</u>

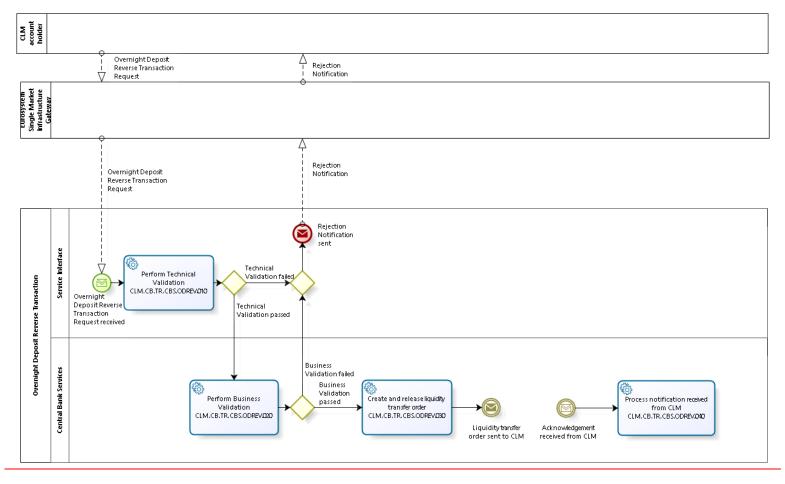
ld	CLM.CB.UR.CBS.ODREQ.040.010
Name	Process notification received from CLM
Description	At the reception of the acknowledgement from CLM, CBS shall process it.



2.3 OVERNIGHT DEPOSIT REVERSE TRANSACTION

Business Process Ref: CLM.CB.BP.CBS.ODREV

2.3.1 Business Process Model



Business Process Model 5: Overnight Deposit Reverse Transaction



2.3.2 Process Overview

Process goal:

This process describes how the reverse of an overnight deposit shall be processed within CBS.

Process context:

Once the CLM account holderparticipants has ve set up an overnight deposit order, it shall be possible for the CLM account holderparticipant (before the deadline for the usage of Standing Facilities) to activate the reverse transaction in order to reduce the amount deposited in the overnight deposit account.

Pre-conditions:

A Party wishing to initiate a reverse overnight deposit needs to:

- Be a CLM <u>account holderparticipant</u>;
- ▶ Be eligible to the overnight deposit facility; and
- ▶ Have a MCA in CLM.

There is also a need for a dedicated overnight deposit account to be set up in CLM.

An overnight deposit for that business day has been previously set up.

Time constraints:

It shall be possible for CLM <u>account holdersparticipants</u> to reverse an overnight deposit from the opening time of CLM (i.e. 19:00 and after overnight deposit and marginal lending reimbursement and interest calculation) until the general cut-off for the use of Standing Facilities (i.e. 18:15 with additional fifteen minutes in the last day of the reserve maintenance period) with the exception of the maintenance window.

Expected results:

The reverse transaction shall lead to the transfer of liquidity from the overnight deposit account to the CLM <u>account holder'sparticipant's MCA</u> in the CLM.

Triggers:

The reverse overnight deposit order can be initiated through:

- A reverse overnight deposit request sent by the CLM account holderparticipant in A2A; or
- Manual input via U2A screen by the CLM <u>account holderparticipant</u> (or CB operator on behalf of the CLM <u>account holderparticipant</u>).



2.3.3 User Requirements

2.3.3.1 GENERAL USER REQUIREMENTS FOR OVERNIGHT DEPOSIT REVERSE TRANSACTION

ld	CLM.CB.UR.CBS.ODREV.000.010
Name	Settlement principles for the <u>liquidity transfer payment</u> orders linked to reverse overnight deposit transaction
Description	The principles described in CLM.CB.UR.CBS.ODREQ.000.010 (Settlement principles for the liquidity transfer orders linked to overnight deposits) shall also apply for the processing of a reverse overnight deposit transaction.

2.3.3.2 Perform Technical Validation

Task Ref: CLM.CB.TR.CBS.ODREV.010

At the reception of a reverse overnight deposit request, the <u>componentservice</u> interface shall complete technical validation by performing checks such as field level validation (fields shall have correct data type and size) and for duplicate messages.

ld	CLM.CB.UR.CBS.ODREV.010.010
Name	Check mandatory fields
Description	The <u>componentservice</u> interface shall ensure that all mandatory fields in the message received are populated.

ld		CLM.CB.UR.CBS.ODREV.010.020
Name		Check for duplicate message
Description	on	The <u>component</u> service interface shall ensure that the same message has not already been received.

ld	CLM.CB.UR.CBS.ODREV.010.030
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the <u>componentservice</u> interface shall continue to validate as far as possible and report all negative results together in a single message. The <u>componentservice</u> interface shall reject the order only after performing all possible technical validations.



ld	CLM.CB.UR.CBS.ODREV.010.040
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the request shall be sent to CBS for further processing.

Id	CLM.CB.UR.CBS.ODREV.010.050
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CLM account holderparticipant. In case of a manual input via the U2A screen, the rejection notificationerror message shall be displayed directly on the screen with the relevant error code(s).

2.3.3.3 Perform Business Validation

Task Ref: CLM.CB.TR.CBS.ODREV.020

In case of a positive result of the technical validation of the reverse overnight deposit order, CBS shall validate the message received against the reference data and perform additional checks/validations.

ld	CLM.CB.UR.CBS.ODREV.020.010
Name	Authorisation check
Description	CBS shall check that only authorised <u>users of the CLM account</u> <u>holderparticipants</u> are allowed to send a reverse overnight deposit request for the relevant CLM <u>account holderparticipant</u> .

ld	CLM.CB.UR.CBS.ODREV.020.020
Name	Business validation of the values
Description	CBS shall check that all provided values are valid according to predefined values or cross-field validations.



ld	CLM.CB.UR.CBS.ODREV.020.030
Name	Account check
Description	CBS shall check that the MCA and the overnight deposit account mentioned in the reverse overnight deposit request exist and are active for settlement in the relevant currency. Moreover, CBS shall also check that the CLM account holder of the MCA is not blocked at Party level.

ld	CLM.CB.UR.CBS.ODREV.020.040
Name	Processing in case of failed business validation
Description	In case of a negative result of the business validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing-CLM account holderparticipant. In case of a manual input via the U2A screen, the rejection notificationerror message shall be displayed directly on the screen with the relevant error code(s).

2.3.3.4 CREATE AND RELEASE <u>LIQUIDITY TRANSFERPAYMENT</u> ORDER

Task Ref: CLM.CB.TR.CBS.ODREV.030

In case of a positive result of the business validation checks of the reverse overnight deposit request, CBS shall create a <u>liquidity transferpayment</u> order and transfer it to CLM for further processing.

ld	CLM.CB.UR.CBS.ODREV.030.010
Name	Create and release liquidity transferpayment order
Description	Once the reverse overnight deposit request has successfully passed the business validation checks, CBS shall create and release to CLM a <u>liquidity</u> transferpayment order to transfer the amount indicated in the request from the relevant overnight deposit account to the CLM <u>account holder'sparticipant's</u> MCA.



2.3.3.5 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.ODREV.040

At the reception of the <u>liquidity transfer payment</u> order sent by CBS, CLM shall process it. The processing of the <u>liquidity transfer payment</u> order in CLM is described in <u>section 1.4 on Process intraservice liquidity transfer order in the User Requirements Document for CLM for the business process CLM.BP.CLM.<u>ISLTPAYT</u> (<u>section 1.6 in URD for CLM</u>). Once processed, CLM send an acknowledgement to CBS.</u>

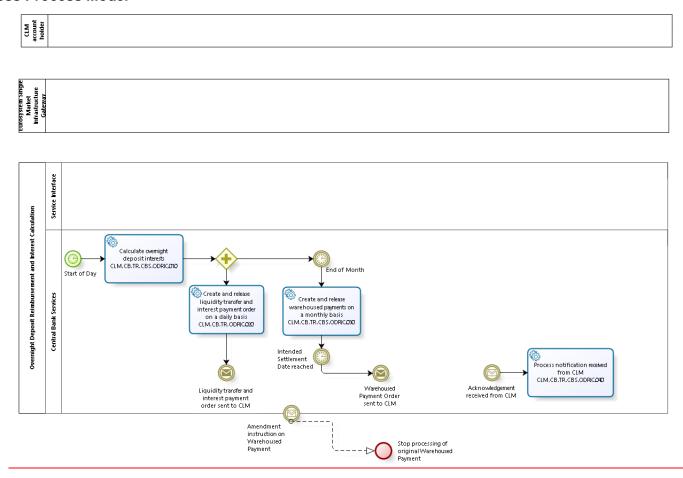
ld	CLM.CB.UR.CBS.ODREV.040.010
Name	Process notification received from CLM
Description	At the reception of the acknowledgement from CLM, CBS shall process it.



2.4 OVERNIGHT DEPOSIT REIMBURSEMENT AND INTEREST CALCULATION

Business Process Ref: CLM.CB.BP.CBS.ODRIC

2.4.1 Business Process Model



Business Process Model 6: Overnight Deposit Reimbursement and Interest Calculation



2.4.2 Process Overview

Process goal:

This process describes how the refunding and the interest calculation linked to an overnight deposit shall be processed within CLM/CBS.

Process context:

At the start of the following business day, CLM/CBS shall calculate the interest to be paid on the overnight deposit.

Pre-conditions:

For the refunding and the interest payment, a Party needs to:

- Be a CLM account holderparticipant;
- ▶ Be eligible to the overnight deposit facility; and
- ► Have a MCA in CLM.

An overnight deposit has been set up on a dedicated overnight deposit account.

CLM/CBS also require the overnight deposit rate for the interest calculation.

Time constraints:

CBS shall calculate, as of the start of the provisioning of liquidity phase on the following business day (i.e. 19:00), the interest to be paid on the overnight deposit and automatically send the <u>liquidity</u> transfer order for the capital amount and the interest payment order to CLM.

Expected results:

The <u>liquidity transfer orderpayment</u> linked to the refunding of the capital amount shall lead to the transfer of liquidity from the overnight deposit account to the CLM account holder'sparticipant's MCA.

In case of positive interest rate, the interest payment order shall credit the CLM <u>account</u> <u>holder'sparticipant's</u> MCA and debit a CB account.

In case of a negative interest rate, the interest payment order shall debit the CLM <u>account</u> <u>holder'sparticipant's</u> MCA and credit the CB account.

Triggers:

CBS shall automatically calculate the interest and send automatically the <u>liquidity transfer order for</u> the capital amount and the interest payment order to CLM.



2.4.3 User Requirements

2.4.3.1 GENERAL USER REQUIREMENTS FOR OVERNIGHT DEPOSIT REIMBURSEMENT AND INTEREST CALCULATION

Id	CLM.CB.UR.CBS.ODRIC.000.010
Name	Settlement principles for the <u>liquidity transfer payment</u> orders linked to reimbursement of and <u>the payment order linked to</u> interest payment on overnight deposit
Description	The principles described in CLM.CB.UR.CBS.ODREQ.000.010 (Settlement principles for the liquidity transfer orders linked to overnight deposits) shall also apply for the processing of liquidity transfer payment orders linked to reimbursement. The principles described in CLM.UR.CLM.PAYT.000.010 (Settlement principles for payment orders linked to Central Bank Operations and Cash Withdrawals or for any other payment order on MCA) defined in the User Requirements Document for CLM and shall also apply for the processing of interest payment on overnight deposit.

2.4.3.2 CALCULATE OVERNIGHT DEPOSIT INTERESTS

Task Ref: CLM.CB.TR.CBS.ODRIC.010

At the start of each business day, CBS shall calculate the interest to be paid on the outstanding overnight deposits initiated on the previous business day.

Id	CLM.CB.UR.CBS.ODRIC.010.010
Name	Calculate interest
Description	For the interest calculation, CBS shall use the relevant overnight deposit interest rate. In case of multiple overnight deposit requests and/or reverse transactions for the same CLM account holderparticipant, the interest shall be calculated based on the aggregated amount.



ld	CLM.CB.UR.CBS.ODRIC.010.020
Name	Calculate interest for out countries
Description	As interest will be paid on a monthly basis to Central Banks from a non- Eurosystem country (instead on a daily basis), CBS shall calculate the cumulated interest to be paid at the end of the calendar month.

2.4.3.3 CREATE AND RELEASE <u>LIQUIDITY TRANSFER PAYMENT</u> AND INTEREST PAYMENT ORDERS ON A DAILY BASIS

Task Ref: CLM.CB.TR.CBS.ODRIC.020

Once the interest calculation is done, CBS shall create and release to CLM the <u>liquidity transfer</u> payment and interest payment orders for the reimbursement of the overnight deposit and the related interest payment for Eurosystem countries on a daily basis.

ld	CLM.CB.UR.CBS.ODRIC.020.010
Name	Create liquidity transferpayment and interest payment orders
Description	Once the daily interest calculation is done, CBS shall create:
	 one <u>liquidity transferpayment</u> order for the capital amount (to debit the relevant overnight deposit account and credit the CLM <u>account</u> <u>holder'sparticipant's</u> MCA) and
	 an interest payment order for the interest amount (to debit (credit) the CB account and credit (debit) the CLM account holder'sparticipant's MCA in case of negative (positive) overnight deposit rate)¹.
	For Central Banks from non-Eurosystem countries, CBS shall only create one
	liquidity transferpayment order for the capital amount (CBS shall create at the
	end of the month warehoused payment orders for the cumulated interest
	payment amount).

ld	CLM.CB.UR.CBS.ODRIC.020.020
Name	Release of the liquidity transferpayment and interest payment orders to CLM
Description	Once created, the <u>liquidity transferpayment</u> and interest payment orders shall be sent to CLM for further processing.

Version: 1.1.2 Page 42 of 92 Date: xx/xx/2018

¹ CBS shall generate an interest payment even in case the overnight deposit rate is zero.



2.4.3.4 CREATE AND RELEASE WAREHOUSED PAYMENTS ON A MONTHLY BASIS

Task Ref: CLM.CB.TR.CBS.ODRIC.030

At the end of the month, CBS shall create and release to CLM the warehoused payment orders for the interest payment amounts calculated for the Central Banks from non-Eurosystem countries.

ld	CLM.CB.UR.CBS.ODRIC.030.010
Name	Create warehoused payment orders
Description	In the case of Central Banks from non-Eurosystem countries, CBS shall create on the first business day of the following calendar month warehoused payment orders for the cumulated interest to be paid.
	The warehoused payment <u>orders</u> shall have a settlement date ten calendar days after the first business day of the following month. The respective connected Central Bank shall have the possibility to check the interest
	calculated and to cancel the warehoused payment order if the calculation is not correct.

ld	CLM.CB.UR.CBS.ODRIC.030.020
Name	Release warehoused payment orders to CLM
Description	CBS shall release the warehoused payment <u>order</u> s to CLM for further processing on the intended settlement date (i.e. ten calendar days after the first business day of the following month).



2.4.3.5 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.ODRIC.040

At the reception of the <u>liquidity transfer order</u>, payment order or warehouse<u>d</u> payment order sent by CBS, CLM shall process them and send an acknowledgement to CBS once they are processed. The processing of the payment order in CLM is described in <u>section 1.6 on Process payment order linked</u> to Central Bank Operations and Cash Withdrawals in the User Requirements Document for CLM for the business process CLM.BP.CLM.PAYT (<u>section 1.6 in URD for CLM</u>). The processing of the <u>liquidity transfer order in CLM is described in section 1.4 on Process intra-service liquidity transfer order in the User Requirements Document for CLM for the business process CLM.BP.CLM.ISLT.</u>

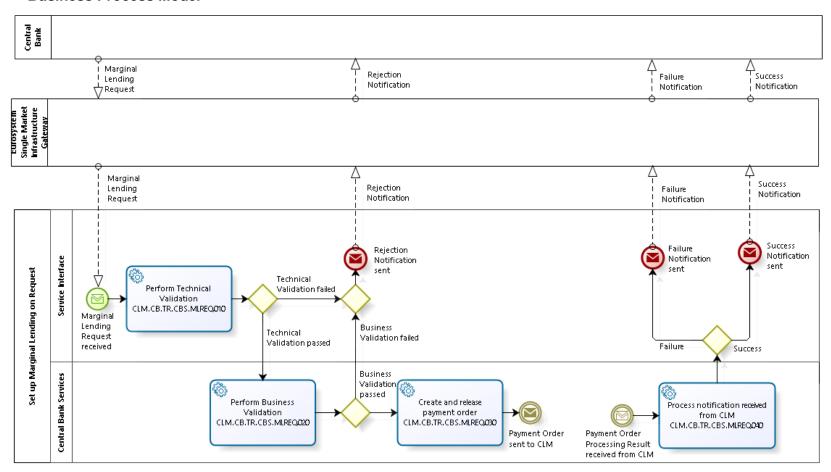
ld	CLM.CB.UR.CBS.ODRIC.040.010
Name	Send notification
Description	At the reception of the notification from CLM, CBS shall process it.



2.5 SET UP MARGINAL LENDING ON REQUEST

Business Process Ref: CLM.CB.BP.CBS.MLREQ

2.5.1 Business Process Model



Business Process Model 7: Set up Marginal Lending on Request



2.5.2 Process Overview

Process goal:

This process describes how the setup of a marginal lending on request shall be processed within CBS.

Process context:

Counterparties can use the marginal lending facility to obtain overnight liquidity from the CBs against eligible assets. The marginal lending on request is initiated by the CLM <u>account holderparticipant</u> through the CB system.

Pre-conditions:

To set up a marginal lending on request, a Party needs to:

- Be a participant in CLM account holder;
- ▶ Be eligible to the marginal lending facility; and
- ▶ Have a MCA in CLM.

Moreover, there is a need for dedicated marginal lending accounts in CLM.

Time constraints:

CBS shall be able to receive and process a marginal lending on request as of opening its service for the new business day (i.e. 19:00 and after overnight deposit and marginal lending reimbursement and interest calculation) until the CB general cut-off for the use of Standing Facilities (i.e. 18:40 with additional fifteen minutes in the last day of the reserve maintenance period) with the exception of the maintenance window.

Expected results:

The successful processing of a marginal lending on request shall lead to the credit on the CLM account holder'sparticipant's MCA and the debit on the marginal lending account.

Triggers:

The marginal lending on request can be initiated through:

- ▶ An order sent by the CB system; or
- Manual input via U2A screen by the CB operator.



2.5.3 User Requirements

2.5.3.1 GENERAL USER REQUIREMENTS FOR SET UP MARGINAL LENDING ON REQUEST

Id	CLM.CB.UR.CBS.MLREQ.000.010
Name	Settlement principles for the payment orders linked to marginal lending on request
Description	The settlement principles for payment <u>order</u> s described in <u>section 1.6 on</u> Process payment order linked to Central Bank Operations and Cash Withdrawals in the User Requirements Document for CLM for the business process CLM.BP.CLM.PAYT shall apply.

2.5.3.2 Perform Technical Validation

Task Ref: CLM.CB.TR.CBS.MLREQ.010

At the reception of a marginal lending on request order sent by the CB system, the <u>component</u>service interface shall complete technical validation by performing checks such as field level validation (fields shall have correct data type and size) and for duplicate messages.

Id	CLM.CB.UR.CBS.MLREQ.010.010
Name	Check mandatory fields
Description	The <u>componentservice</u> interface shall ensure that all mandatory fields in the message received are populated.

ld	CLM.CB.UR.CBS.MLREQ.010.020
Name	Check for duplicate message
Description	The <u>component</u> service interface shall ensure that the same message has not already been received.



ld	CLM.CB.UR.CBS.MLREQ.010.030
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the <u>componentservice</u> interface shall continue to validate as far as possible and report all negative results together in a single message. The <u>componentservice</u> interface shall reject the order only after performing all possible technical validations.

ld	CLM.CB.UR.CBS.MLREQ.010.040
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the order shall be sent to CBS for further processing.

ld	CLM.CB.UR.CBS.MLREQ.010.050
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.
	In case of a manual input via the U2A screen, the rejection notification error message shall be displayed directly on the screen with the relevant error code(s).



2.5.3.3 Perform Business Validation

Task Ref: CLM.CB.TR.CBS.MLREQ.020

In case of a positive result of the technical validation of the marginal lending on request order, CBS shall validate the message received against the reference data and perform additional checks/validations.

ld	CLM.CB.UR.CBS.MLREQ.020.010
Name	Authorisation check
	CBS shall check that that the instructing CB system (or CB operator in case of manual input) is authorised to initiate a marginal lending on request for the CLM account holderparticipant mentioned in the order.

ld	CLM.CB.UR.CBS.MLREQ.020.020
Name	Business validation of the values
Description	CBS shall check that all provided values are valid according to predefined values or cross-field validations.

ld	CLM.CB.UR.CBS.MLREQ.020.030
Name	Account check
Description	CBS shall check that the MCA and the marginal lending account mentioned in
	the marginal lending on request order exist and are active for settlement in the
	relevant currency. Moreover, CBS shall also check that the CLM account
	holder of the MCA is not blocked at Party level.



	ld	CLM.CB.UR.CBS.MLREQ.020.040
	Name	Processing in case of failed business validation
	Description	In case of a negative result of the business validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.
Ī		In case of a manual input via the U2A screen, the rejection notificationerror message shall be displayed directly on the screen with the relevant error code(s).

2.5.3.4 CREATE AND RELEASE PAYMENT ORDER

Task Ref: CLM.CB.TR.CBS.MLREQ.030

In case of a positive result of the business validation checks of the marginal lending on request order, CBS shall create a payment order and send it to CLM for further processing.

ld	CLM.CB.UR.CBS.MLREQ.030.010
Name	Create and release payment order
Description	Once the marginal lending on request order has successfully passed the business validation checks, CBS shall create a payment order to:
	 Credit the CLM <u>account holder'sparticipant's</u> MCA; and Debit the relevant marginal lending account.

ld	CLM.CB.UR.CBS.MLREQ.030.020
Name	Release of the payment order to CLM
Description	Once created, CBS shall release the payment order on behalf of the CB system to CLM for further processing.



2.5.3.5 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.MLREQ.040

At the reception of the payment order sent by CBS, CLM shall process it and send a confirmation or a rejection notification to CBS. The processing of the payment order in CLM is described in <u>section 1.6</u> on Process payment order linked to Central Bank Operations and Cash Withdrawals in the User Requirements Document for CLM for the business process CLM.BP.CLM.PAYT—(section 1.6 in URD for CLM).

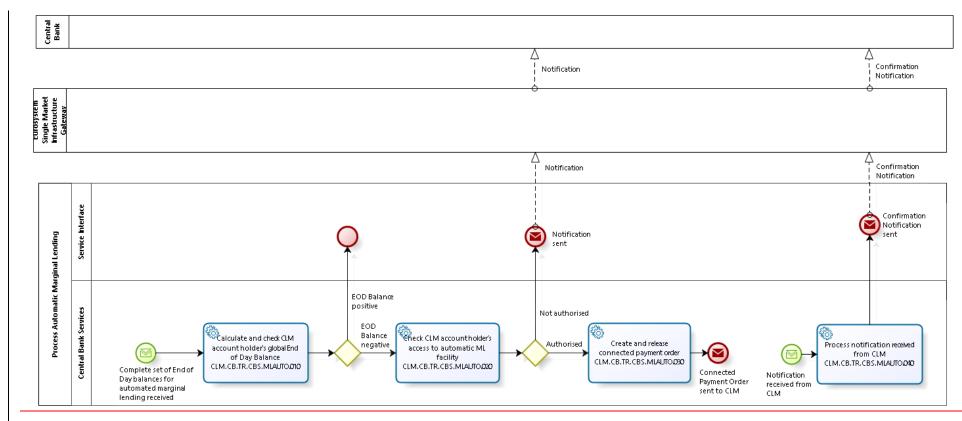
ld	CLM.CB.UR.CBS.MLREQ.040.010
Name	Send notification
Description	At the reception of the confirmation or rejection notification with the appropriate error code(s) from CLM, CBS shall relay this notification to the instructing CB system. This only applies as of the ECMS go-live. In case of a manual input via the U2A screen, the notification error message shall be displayed directly on the screen with the relevant error code(s).



2.6 PROCESS AUTOMATIC MARGINAL LENDING

Business Process Ref: CLM.CB.BP.CBS.MLAUTO

2.6.1 Business Process Model



Business Process Model 8: Process Automatic Marginal Lending



2.6.2 Process Overview

Process goal:

This process describes how CBS shall initiate and process an automatic marginal lending.

Process context:

The aim of the automatic marginal lending is the automatic transformation of intraday credit into overnight credit at the end of the business day.

Pre-conditions:

For the setup of an automatic marginal lending, a Party needs to:

- ► Be a CLM <u>account holderparticipant</u>;
- Be eligible to the marginal lending facility; and
- ► Have a MCA in CLM.

Moreover, there is a need for dedicated marginal lending accounts in CLM.

Time constraints:

The automatic marginal lending shall take place during the End of Day processing after the cut-off for Standing Facilities.

Expected results:

The successful processing of an automatic marginal lending shall lead to the credit on the CLM <u>account holder's participant's</u> MCA, the debit on the marginal lending account and the concurrent update of the CLM <u>account holder's participant's</u> credit line.

Triggers:

During the End of Day process, CBS shall automatically check the global End of Day balances of each Party eligible to the marginal lending facility (in TIPS, T2S, RTGS and CLM) and identify if there is a need for an automatic marginal lending.



2.6.3 User Requirements

2.6.3.1 GENERAL USER REQUIREMENTS FOR PROCESS OF AUTOMATIC MARGINAL LENDING

ld	CLM.CB.UR.CBS.MLAUTO.000.010
Name	Availability of Parties' End of Day balances
Description	The automatic marginal lending process is dependent on the availability of all Parties' End of Day balances. CBS must therefore make sure that all End of Day balances are available before initiating the process.

2.6.3.2 CALCULATE AND CHECK CLM <u>ACCOUNT HOLDER'S PARTICIPANT'S</u> GLOBAL END OF DAY BALANCE

Task Ref: CLM.CB.TR.CBS.MLAUTO.010

During the End of Day process, CBS shall calculate the global End of Day balance (composed of the individual End of Day balances within each settlement service) for each CLM <u>account holderparticipant</u>.

ld	CLM.CB.UR.CBS.MLAUTO.010.010
Name	Calculate CLM account holder'sparticipant's global End of Day balance
Description	To calculate a CLM <u>account holder'sparticipant's</u> global End of Day balance, CBS shall consider the End of Day balances of the DCAs that belong to the CLM <u>account holderparticipant</u> and the End of Day balance of the CLM <u>account holder'sparticipant's</u> MCA(s).

ld	CLM.CB.UR.CBS.MLAUTO.010.020
Name	Check CLM account holder'sparticipant's global End of Day balance
Description	CBS shall check if the global End of Day balance is positive or negative.



2.6.3.3 CHECK CLM <u>ACCOUNT HOLDER'SPARTICIPANT'S</u> ACCESS TO AUTOMATIC MARGINAL LENDING FACILITY

Task Ref: CLM.CB.TR.CBS.MLAUTO.020

ld	CLM.CB.UR.CBS.MLAUTO.020.010
Name	Check access to marginal lending facility
Description	If the global End of Day Balance is negative (i.e. meaning that the CLM account holderparticipant has not returned its intraday credit), CBS shall check if the CLM account holderparticipant is allowed to access the marginal lending facility.

ld	CLM.CB.UR.CBS.MLAUTO.020.020
Name	Notify spill over
Description	If the CLM <u>account holderparticipant</u> is not allowed to access the marginal lending facility, CBS shall notify, through a message, about the spill over to the relevant CB responsible for applying the penalty procedure.

2.6.3.4 CREATE AND RELEASE CONNECTED PAYMENT ORDER

Task Ref: CLM.CB.TR.CBS.MLAUTO.030

In case there is a need for and the CLM <u>account holderparticipants</u> is allowed to access the automatic marginal lending facility, CBS shall create and release to CLM a connected payment order.

ld	CLM.CB.UR.CBS.MLAUTO.030.010
Name	Create connected payment order
Description	If the CLM <u>account holderparticipant</u> is allowed to access the marginal lending facility, CBS shall create a connected payment <u>order</u> to:
	 Credit the CLM <u>account holder'sparticipant's</u> MCA; Debit the relevant marginal lending account; and Simultaneously decrease the CLM <u>account holder'sparticipant's</u> credit line.



ld	CLM.CB.UR.CBS.MLAUTO.030.020
Name	Release of the connected payment order to CLM
Description	Once created, CBS shall release the connected payment <u>order</u> on behalf of the CB system to CLM for further processing.

2.6.3.5 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.MLAUTO.040

At the reception of the connected payment order sent by CBS, CLM shall process it and then send a confirmation notification to CBS. The processing of the payment orders in CLM is described in <u>section 1.3 on Connected Payment Processing in this User Requirements Document for the business process CLM.CB.BP.CLM.CP (Connected Payment Processing).</u>

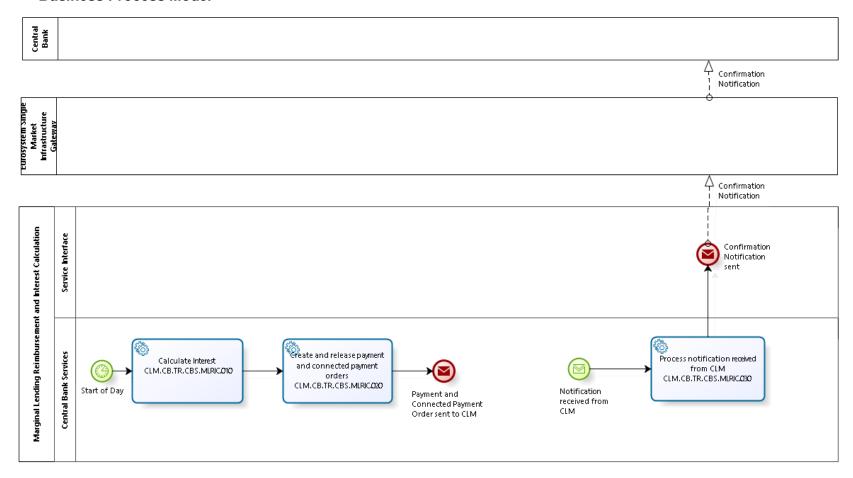
Id	CLM.CB.UR.CBS.MLAUTO.040.010
Name	Send notification
Description	At the reception of the confirmation notification from CLM, CBS shall relay this notification to the relevant CB system.



2.7 MARGINAL LENDING REIMBURSEMENT AND INTEREST CALCULATION

Business Process Ref: CLM.CB.BP.CBS.MLRIC

2.7.1 Business Process Model



Business Process Model 9: Marginal Lending Reimbursement and Interest Calculation



2.7.2 Process Overview

Process goal:

This process describes how the reimbursement and the interest calculation linked to a marginal lending (on request and / or automatic) shall be processed within CBS.

Process context:

At the start of the business day in CLM, CBS shall calculate the interest to be paid on the marginal lending (on request and / or automatic) initiated on the previous business day.

Pre-conditions:

For the reimbursement and the interest payment, a Party needs to:

- ▶ Be a CLM account holderparticipant;
- ▶ Be eligible to the marginal lending facility; and
- ▶ Have a MCA in CLM.

There is also a need for dedicated marginal lending accounts in CLM.

Moreover, the reimbursement and interest calculation process shall start if there are existing marginal lending transactions (on request and / or automatic) from the previous business day.

Time constraints:

CBS shall calculate as of the start of provisioning of liquidity phase on the following business day (i.e. 19.00) the interest to be paid on the marginal lending (on request and/or automatic) and automatically send the payment <u>orders</u> on capital amount and the interest amount to CLM.

Expected results:

The connected payment <u>order</u> linked to the reimbursement of an automatic marginal lending shall lead to the debit on the CLM <u>account holder'sparticipant's</u> MCA, the credit on the marginal lending account and the concurrent update of the CLM <u>account holder'sparticipant's</u> credit line.

The payment <u>order</u> linked to the reimbursement of a marginal lending on request shall lead to the debit on the CLM <u>account holder'sparticipant's</u> MCA and the credit on the marginal lending account.

The interest payment order shall debit the CLM <u>account holder'sparticipant's</u> MCA and credit the CB account.



2.7.3 User Requirements

2.7.3.1 GENERAL USER REQUIREMENTS FOR MARGINAL LENDING REIMBURSEMENT AND INTEREST CALCULATION

ld	CLM.CB.UR.CBS.MLRIC.000.010
Name	Settlement principles for the payment orders linked to the reimbursement of marginal lending on request and interest payment
Description	The settlement principles for payment <u>orders</u> described in <u>section 1.6 on Process payment order linked to Central Bank Operations and Cash Withdrawals in the User Requirements Document for CLM for the business process CLM.BP.CLM.PAYT shall apply to interest payment orders and payment orders linked to the reimbursement of a marginal lending on request.</u>

ld	CLM.CB.UR.CBS.MLRIC.000.020
Name	Settlement principles for the connected payment orders linked to the reimbursement of automatic marginal lending
Description	The settlement principles described in section 1.3 on Connected Payment Processing in this User Requirements Document for the business process CLM.CB.BP.CLM.CP shall apply to connected payment orders linked to the reimbursement of an automatic marginal lending.

2.7.3.2 CALCULATE INTEREST

Task Ref: CLM.CB.TR.CBS.MLRIC.010

At the start of each business day, CBS shall calculate the interest to be paid on the outstanding marginal lending orders (on request and/or automatic) initiated on the previous business day.

Id	CLM.CB.UR.CBS.MLRIC.010.010
Name	Calculate interest
Description	For the interest calculation, CBS shall use the relevant marginal lending interest rate.
	CBS shall calculate the interest at operation level. In case of multiple marginal lending operations for the same CLM account holderparticipant, the interest shall be calculated based on the aggregated amount.



Id	CLM.CB.UR.CBS.MLRIC.010.020
Name	Option not to include marginal lending on request in the interest calculation
Description	It shall be possible for the TARGETa sService Deskeperator to exclude the marginal lending on request from the interest calculation, i.e. CBS shall in this case only calculate the interest for automatic marginal lending. This exclusion shall be possible at the level of the currency.

2.7.3.3 CREATE AND RELEASE PAYMENT AND CONNECTED PAYMENT ORDERS

Task Ref: CLM.CB.TR.CBS.MLRIC.020

Once the interest calculation is done, CBS shall create and release to CLM payment and/or connected payment orders for the reimbursement and interest payment.

ld	CLM.CB.UR.CBS.MLRIC.020.010
Name	Create and release payment order for the reimbursement of a marginal lending on request
Description	For a marginal lending on request, CBS shall create and release to CLM a payment order to:
	 Debit the CLM <u>account holder'sparticipant's</u> MCA; and Credit the marginal lending account.

	ld	CLM.CB.UR.CBS.MLRIC.020.020
	Name	Create and release connected payment order for the reimbursement of an automatic marginal lending
	Description	For an automatic marginal lending, CBS shall create and release to CLM a connected payment order to:
		 Debit the CLM <u>account holder'sparticipant's</u> MCA; Credit the marginal lending account; and
ĺ		Simultaneously increase the CLM <u>account holder'sparticipant's</u> credit line.

ld	CLM.CB.UR.CBS.MLRIC.020.030
Name	Create and release a payment order for the interest payment
Description	For the interest payment, CBS shall create and release to CLM a payment order to:
	Debit the CLM <u>account holder'sparticipant's</u> MCA; and



Credit the CB account.
CBS shall generate an interest payment <u>order</u> even in case the marginal lending rate is zero.

2.7.3.4 PROCESS NOTIFICATION RECEIVED FROM CLM

Task Ref: CLM.CB.TR.CBS.MLRIC.030

At the reception of the payment and/or connected payment orders sent by CBS, CLM shall process them and then send a confirmation notification to CBS for the refunding of the marginal lending facility.

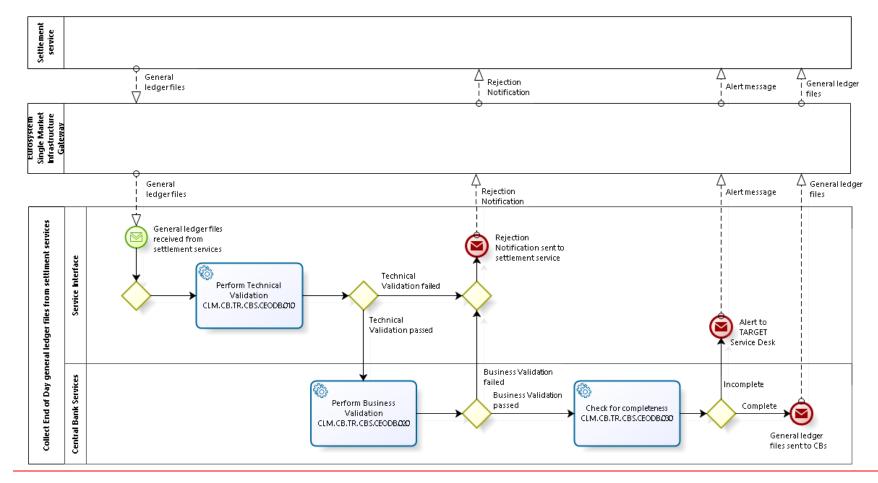
Id	CLM.CB.UR.CBS.MLRIC.030.010
Name	Send notification to CB system
Description	At the reception of the confirmation notification from CLM, CBS shall relay this notification to the relevant CB system.



2.8 COLLECT END OF DAY GENERAL LEDGER FILES FROM SETTLEMENT SERVICES

Business Process Ref: CLM.CB.BP.CBS.CEODB

2.8.1 Business Process Model



Business Process Model 10: Collect End of Day general ledger files from settlement services



2.8.2 Process Overview

Process goal:

This process describes how CBS shall collect the End of Day general ledger files from the various settlement services (CLM, RTGS, TIPS, T2S and Contingency <u>SettlementModule</u> (CMS)) and relay them to the relevant CBs.

The Contingency Settlement -service shall only deliver the information to CLM once CMS is closed.

Process context:

The following shall prevail with regards to general ledger information:

- ▶ One general ledger file per settlement service (CLM, RTGS, TIPS, T2S and CSM);
- ▶ The format to be used shall be a structured ISO message; and
- ▶ All general ledger files shall be delivered to CBs from CBS.

The collected End of Day general ledger files received from the different settlement services will then be subsequently used by CLM/CBS to:

- Verify the minimum reserve fulfilment;
- Calculate the automatic marginal lending; and
- Calculate the TARGET balances.

CLM shall produce the CLM general ledger file after the settlement of Standing Facilities. However CLM balances shall be taken into account for the calculation mentioned before.

Pre-conditions:

The process is dependent on the receiving of the End of Day general ledger files from the various settlement services (CLM, RTGS, TIPS, T2S and CSM).

Time constraints:

CBS shall receive the general ledger files from every settlement service (with the exception of CLM) by the marginal lending cut-off (i.e. 18:15 with additional fifteen minutes in the last day of the reserve maintenance period).

CLM shall send the files after the settlement of Standing Facilities.

Triggers:

The start of the End of Day process shall be the trigger to the collection of the End of Day general ledger files by CBS.



2.8.3 User Requirements

2.8.3.1 GENERAL USER REQUIREMENTS FOR THE COLLECTION OF END OF DAY GENERAL LEDGER FILES FROM THE SETTLEMENT SERVICES

ld	CLM.CB.UR.CBS.CEODB.000.010
Name	Information to be included in the End of Day general ledger files for the settlement services (with the exception of CLM)
Description	The End of Day general ledger files sent by the settlement services (with the exception of CLM) shall contain the following information for each CB:
	 Starting and End of Day balance of the account (and sub accounts); and Turnover on accounts (and sub accounts).

Id	CLM.CB.UR.CBS.CEODB.000.020
Name	Information to be included in the End of Day general ledger files for CLM
Description	The End of Day general ledger files sent by CLM shall contain the following information for each CB:
	 Starting and End of Day balance of the CB's ECB account; Starting and End of Day balance of the accounts; and Turnover on accounts.

2.8.3.2 Perform Technical and Business Validation

Task Ref: CLM.CB.TR.CBS.CEODB.010 and CLM.CB.TR.CBS.CEODB.020

At the end of each business day, CBS shall receive an End of Day general ledger file from each settlement service. At the reception of the general ledger file, CBS shall perform technical and business validation checks.

Id	CLM.CB.UR.CBS.CEODB.010.010
Name	File format
Description	The files to be received from each settlement service shall be harmonised and structured XML files.



ld	CLM.CB.UR.CBS.CEODB.010.020
Name	Check mandatory fields
Description	CBS shall ensure that all mandatory fields are populated.

ld	CLM.CB.UR.CBS.CEODB.010.030
Name	Processing in case of failed validation checks
Description	In case of a negative result of the validation checks, the file shall be rejected and an alert shall be sent to the TARGET Service Desk with the relevant error code(s).

2.8.3.3 CHECK FOR COMPLETENESS

Task Ref: CLM.CB.TR.CBS.CEODB.030

ld	CLM.CB.UR.CBS.CEODB.030.010
Name	Check for completeness
Description	CBS shall check that it has received all End of Day general ledger files from all settlement services.

ld		CLM.CB.UR.CBS.CEODB.030.020
Name		Generate alert if an End of Day general ledger file is missing
Descript	ion	If an End of Day general ledger file is not received from a settlement service within a predefined timeframe (that shall be configurable), an alert message shall be generated by CBS to the TARGET Service Desk for investigation purposes.

ld	CLM.CB.UR.CBS.CEODB.030.030
10	CLIVI.OB.OT.OBO.OLOBB.000.000
Name	End of Day processing in case of a missing End of Day general ledger file
Description	The End of Day processing shall be interrupted if any End of Day general ledger file from a settlement service has not been received.
	It shall however be possible for the TARGET Service Deska service operator to re-start the End of Day processing if one or multiple general ledger files are

T2-T2S Consolidation
User Requirements
T2 - Central Liquidity Management
(CLM) component



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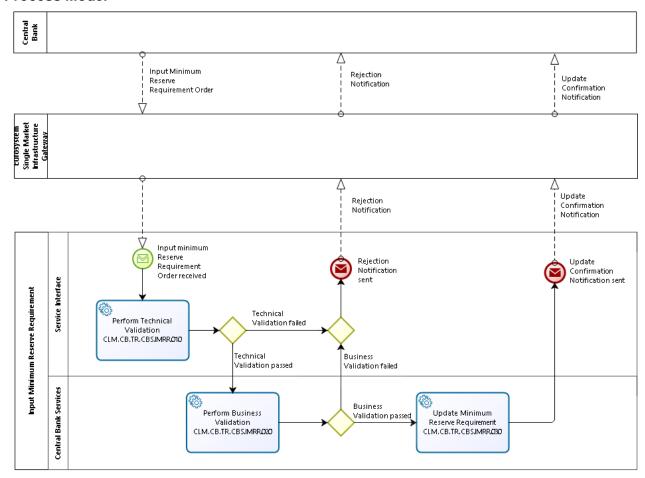
	missing.
ld	CLM.CB.UR.CBS.CEODB.030.040
Name	Processing in case of completeness
Description	In case of completeness, CBS shall relay the general ledger files to CBs.



2.9 INPUT MINIMUM RESERVE REQUIREMENT

Business Process Ref: CLM.CB.BP.CBS.IMRR

2.9.1 Business Process Model



Business Process Model 11: Input Minimum Reserve Requirement

2.9.2 Process Overview

Process goal:

This process describes how CBS shall process the minimum reserve requirement input by CBs.

Process context:

This minimum reserve requirement will then be subsequently used to verify the credit institution's minimum reserve fulfilment.

Pre-conditions:

The credit institution needs to be subject to minimum reserve.

Time constraints:

CBs shall be able to input a minimum reserve requirement at any time for the upcoming minimum reserve periods before the period starts.

Expected results:

The minimum reserve requirement shall be updated with the new amount indicated by the CB.

Triggers:

The input of the minimum reserve requirement can be initiated through:

- ▶ An order sent by the relevant CB system; or
- Manual input via U2A screen by the CB operator.

2.9.3 User Requirements

2.9.3.1 Perform Technical Validation

Task Ref: CLM.CB.TR.CBS.IMRR.010

At the reception of a minimum reserve requirement input request, the <u>componentservice</u> interface shall complete technical validation by performing checks such as field level validation (fields shall have correct data type and size).

ld	CLM.CB.UR.CBS.IMRR.010.010
Name	Check mandatory fields
Description	The <u>component</u> service interface shall ensure that all mandatory fields in the message received are populated.



ld	CLM.CB.UR.CBS.IMRR.010.020
Name	Perform all possible technical validations
Description	After encountering the first negative validation result, the <u>componentservice</u> interface shall continue to validate as far as possible and report all negative results together in a single message. The <u>componentservice</u> interface shall reject the order only after performing all possible technical validations.

ld	CLM.CB.UR.CBS.IMRR.010.030
Name	Processing in case of passed technical validation
Description	In case of a positive result of the technical validation, the order shall be sent to CBS for further processing.

ld	CLM.CB.UR.CBS.IMRR.010.040
Name	Processing in case of failed technical validation
Description	In case of a negative result of the technical validation, the order shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.
	In case of a manual input via the U2A screen, the rejection notification error message shall be displayed directly on the screen with the relevant error code(s).



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2.9.3.2 Perform Business Validation

Task Ref: CLM.CB.TR.CBS.IMRR.020

In case of a positive result of the technical validation of the minimum reserve requirement input request, CBS shall also validate the message received against the reference data and perform additional checks/validations.

ld	CLM.CB.UR.CBS.IMRR.020.010
Name	Authorisation check
Description	CBS shall check that only authorised CB systems or CB operators (in case of manual input) are allowed to send a minimum reserve requirement input request.

ld	CLM.CB.UR.CBS.IMRR.020.020
Name	Business validation of the values
Description	CBS shall check that all provided values are valid according to predefined values or cross-field validations.

ld	CLM.CB.UR.CBS.IMRR.020.030
Name	Processing in case of failed business validation
Description	In case of a negative result of the business validation, the request shall be rejected and a notification with the appropriate error code(s) shall be sent to the instructing CB system.
	In case of a manual input via the U2A screen, the rejection notificationerror message shall be displayed directly on the screen with the relevant error code(s).



2.9.3.3 UPDATE MINIMUM RESERVE REQUIREMENT

Task Ref: CLM.CB.TR.CBS.IMRR.030

In case of a positive result of the business validation of the minimum reserve requirement input request, CBS shall update the minimum reserve requirement value.

ld	CLM.CB.UR.CBS.IMRR.030.010
Name	Minimum reserve requirement value update
Description	In case of a positive result of the business validation of the minimum reserve requirement input request, CBS shall update the minimum reserve requirement for the relevant credit institution.

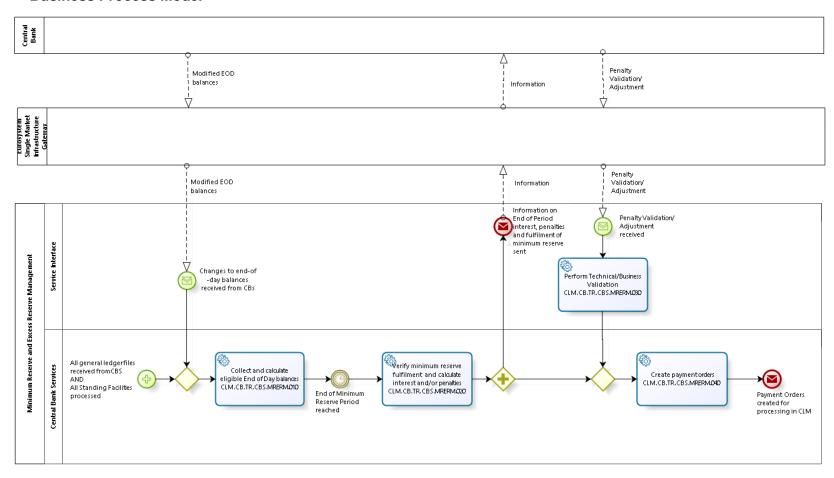
ld	CLM.CB.UR.CBS.IMRR.030.020
Name	Update confirmation to CB system
Description	After the update of the minimum reserve requirement, CBS shall send to the instructing CB system a successful update confirmation. In case of a manual input via the U2A screen, the update confirmation shall be displayed directly on the screen.



2.10 MINIMUM RESERVE AND EXCESS RESERVE MANAGEMENT

Business Process Ref: CLM.CB.BP.CBS.MRERM

2.10.1 Business Process Model



Business Process Model 12: Minimum Reserve and Excess Reserve Management



2.10.2 Process Overview

Process goal:

This process describes how CBS shall perform the minimum and excess reserve requirements management, e.g. verify the minimum reserves fulfilment, calculate the excess of reserve and calculate the interest to be paid to / received from credit institutions for minimum reserves / the excess of reserve.

Pre-conditions:

CBS shall receive all End of Day general ledger files from the settlement services (e.g. CLM, RTGS, T2S and TIPS).

CBS shall provide the functionality to adjust the minimum reserve fulfilment of a <u>CLM account holder</u> participant through U2A and A2A interface.

Time constraints:

CBS shall manage the minimum and excess reserve requirements after the settlement of Standing Facilities and before the start of the new business day.

Expected results:

CBS shall:

- ► Calculate daily for each the MFI's the End of Day balances as well as the running average balances;
- ▶ Verify daily the minimum reserve fulfilment for each MFI and calculate the adjustment balance for the rest of the maintenance period;
- Calculate the interest to be paid to MFIs for minimum reserves after the end of the maintenance period;
- ► Calculate the penalties related to the reserve requirements infringement to be submitted to the relevant CB's validation process at the end of the maintenance period;
- ▶ Calculate negative interest on excess of reserve at the end of the maintenance period;
- ▶ Notify the CBs of the minimum reserve fulfilment, due interest and possible penalties for the pertaining MFIs at the end of the maintenance period;
- ► Create automatically the related credit and debit instructions for the interest payments concerning the minimum reserve fulfilment and send them to CLM at the end of the maintenance period; and
- ► Create automatically the related credit and debit instructions for the interest payment concerning the excess of minimum reserve and send them to CLM at the end of the maintenance period.

Triggers:



CBS shall automatically initiate the minimum and excess reserve requirements management after receiving all End of Day general ledger files from the individual settlement services.

2.10.3 User Requirements

2.10.3.1 COLLECT AND CALCULATE ELIGIBLE END OF DAY BALANCES

Task Ref: CLM.CB.TR.CBS.MRERM.010

ld	CLM.CB.UR.CBS.MRERM.010.010
Name	Collect End of Day balances
Description	CBS shall collect the End of Day balances of all accounts to be included in the minimum reserve and excess of reserve calculation.

	ld	CLM.CB.UR.CBS.MRERM.010.020
	Name	Calculate globalaggregated End of Day balance and running average
	Description	CBS shall calculate for each Party the globalaggregated End of Day balance
J		of the previous business day (which is the sum of the End of Day balances of
		the accounts to be included in the minimum reserve and excess calculation,
		but potentially reduced by the credit line usage on the respective MCAs) as
		well as the running average of the Party's globalaggregated End of Day
		balance up to the previous business day.

Id	CLM.CB.UR.CBS.MRERM.010.040
Name	Verify daily the minimum reserve fulfilment for each MFI
Description	CBS shall also verify on a daily basis for each MFI the minimum reserve fulfilment by calculating the adjustment balance, i.e. the balance necessary to fulfil the minimum reserve.



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2.10.3.2 VERIFY MINIMUM RESERVE FULFILMENT AND CALCULATE INTEREST AND/OR PENALTIES

Task Ref: CLM.CB.TR.CBS.MRERM.020

This task shall take place at the end of the maintenance period, i.e. the period over which compliance with reserve requirements is calculated and for which such minimum reserves must be held on reserve accounts.

ld	CLM.CB.UR.CBS.MRERM.020.010
Name	Verify minimum reserve fulfilment for each MFI
Description	At the end of the maintenance period, CBS shall verify the minimum reserve fulfilment for each MFI, i.e. compare the MFI's <u>globalaggregated</u> End of Day balance running average during the maintenance period with the minimum reserve requirement defined by the relevant CB.

Id	CLM.CB.UR.CBS.MRERM.020.020
Name	Calculate interest for minimum reserves
Description	At the end of the maintenance period, CBS shall calculate the interest to be paid to MFIs for the amounts up to the minimum reserve requirement according to the relevant interest rate.

Id	CLM.CB.UR.CBS.MRERM.020.030
Name	Calculate penalties
Description	At the end of the maintenance period, CBS shall calculate the penalties related to the reserve requirements infringement in case the running average during the maintenance period is lower than the minimum reserve requirement for an MFI.



ld	CLM.CB.UR.CBS.MRERM.020.040
Name	Calculate excess of reserve and interest on excess of reserve
Description	At the end of the maintenance period, CBS shall calculate the excess of minimum reserve and the interest on excess of reserve according to the relevant interest rate.
	For credit institutions subject to minimum reserve requirements, the excess of reserve is the difference between the <u>globalaggregated</u> End of Day balance running average and the minimum reserve requirements.
	For credit institutions not subject to minimum reserve requirements and other Parties (with the exception of CBs), the excess of reserve is the globalaggregated End of Day balance running average.

Id	CLM.CB.UR.CBS.MRERM.020.050
Name	Notification to CB systems
Description	After verifying the minimum reserve fulfilment and the interest / penalties calculation, CBS shall send a notification to the CB systems on the minimum reserve fulfilment, due interest and possible penalties for the pertaining Parties.

With regards to penalties, a feedback from CBs is required before creating the payment orders.

2.10.3.3 Perform Technical/Business Validation

Task Ref: CLM.CB.TR.CBS.MRERM.030

CBS shall perform technical and business validation checks on the feedback received from the CB systems with regards to penalties. The validation of penalties shall be possible on a U2A basis.

ld	CLM.CB.UR.CBS.MRERM.030.010
Name	Check relevance of CB system feedback
Description	CBS shall check that the response received from the CB system is related to a notification it has sent and for which it requires a feedback.



2.10.3.4 CREATE PAYMENT ORDERS

Task Ref: CLM.CB.TR.CBS.MRERM.040

After the interest and penalties calculation, CBS shall create payment orders to be processed within CLM.

ld	CLM.CB.UR.CBS.MRERM.040.010
Name	Create payment orders for minimum reserve fulfilment
Description	After the interest and penalties calculation, CBS shall create automatically the related payment orders for minimum reserve fulfilment (the payment order with regards to penalties shall only be created after the CB validation process) and send them to CLM for further processing.

ld	CLM.CB.UR.CBS.MRERM.040.020
Name	Create payment orders for excess of minimum reserve
Description	After the interest calculation, CBS shall create automatically the related payment orders for excess of minimum reserve and send them to CLM for further processing (in case of interest rate =0% no payment order shall be created).

ld	CLM.CB.UR.CBS.MRERM.040.030
Name	Value date of payment orders
Description	The value date of interest related payment orders shall be two business days after the end of the maintenance period.



3 USER INTERACTION

The objective of this section is to provide the user requirements related to user interactions covering the usage of U2A or A2A mode. A Graphical User Interface (GUI) shall be provided for componentseach-service, offering functionalities to access information in U2A mode. The GUI(s) shall be harmonised to the best possible extent.

These requirements do not imply any particular consideration with regards to design and the implementation of the actual screens.

3.1 GENERAL USER REQUIREMENTS FOR USER INTERACTION

3.1.1 Query

ld	CLM.CB.UR.ALL.UI.010
Name	Query Audit Trail
Description	Each Service component shall provide the functionality to query through U2A and A2A interfaces the modified data at the attribute level, the user performing the change and the timestamp of the change. It should be visible which attributes were changed, together with the new values. The query shall return relevant business attributes of the Audit Trail.

ld	CLM.CB.UR.ALL.UI.020
Name	Query System time
Description	All Services-components shall provide the functionality to query system time to align the time of a connected application through an application-to-application interface (A2A). The query shall return the System time.

3.1.2 Action

ld	CLM.CB.UR.ALL.UI.030
Name	Amend/ Revoke Task(s)
Description	All Services components shall provide the functionality to amend or revoke



task(s) through the U2A interfaces.

Id	CLM.CB.UR.ALL.UI.040
Name	Act on behalf
Description	All Services components shall provide the functionality to act on behalf through U2A and A2A interfaces for: Central Banks, to act on behalf of any Party belonging to their banking community; and

The TARGET Service Desk, to act on behalf of any Party.

ld	CLM.CB.UR.ALL.UI.050
Name	Access rights
Description	All Services components shall ensure that a user can only access functionality and data that is allowed by the access rights granted to the user through the Roles associated with the user.

ld	CLM.CB.UR.ALL.UI.060
Name	Four-eyes (confirm, revoke, amend)
Description	All <u>Services_components_s</u> shall provide the functionality to use the four-eyes approval process, through U2A interface, allowing the authoriser to confirm, revoke or amend the order.

3.2 USER INTERACTION FOR CENTRAL BANK SERVICES

The section below describes the query and action possibilities in Central Bank Services for Central Banks (or Crisis managers).

3.2.1 Query

This User Interaction section covers intraday queries. For intraday queries, the Value Date would be by default the current business day.

For U2A queries, the Pparty BIC and the account number would be deduced from the data scope of the user. The data scope is described in section 4.1 on User Rolesights and Access / Overview in the User Requirements Document for Common Components Shared Services.



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The extended list of the selection criteria and the output of the queries would be defined in the UDFS.

All described queries in this section shall be provided in U2A and A2A mode unless otherwise stated.

There are further queries and actions provided and described in the User Requirements Document for Common ComponentsShared Services which are of relevance for the CLM and CBS-services.

ld	CLM.CB.UR.CBS.UI.010
Name	Query Standing Facilities transaction of the respective banking community
Description	CBS shall provide the function to query Standing Facilities transactions (marginal lending and overnight deposit) of the respective banking community. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. The query shall return the following information about all Standing Facilities
	transactions of the respective banking community for the current business day:
	 Party BIC Party Name Operation type (marginal lending or overnight deposit) Transaction Reference Number Cradit/Debit
	 Credit/Debit Amount of the transaction Status Entry Time Settlement Time

ld	CLM.CB.UR.CBS.UI.020
Name	Query minimum reserve requirements per CLM account holderparticipant
Description	CBS shall provide a functionality to query the minimum reserve requirements per CLM account holderparticipant. The Central Bank user can query within his data scope, which is determined by the Party BICs and MCA numbers. The user shall specify the following mandatory selection criteria. Mandatory selection criteria: Maintenance period (current or upcoming) Either Party BIC or Party Name
	The query shall return all relevant information about minimum reserve requirements including excess reserve and minimum reserve running average

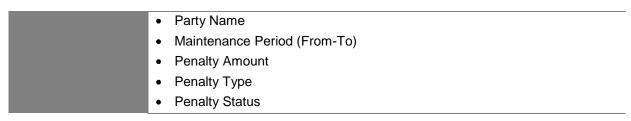


per <u>CLM account holderparticipant</u>.

Id	CLM.CB.UR.CBS.UI.030
Name	Query minimum reserve of a banking community
Description	CBS shall provide a functionality to query the minimum reserve requirement of a whole banking community listing the CLM account holdersparticipants being subject to minimum reserve requirement. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. The user shall specify the following mandatory selection criterion. Mandatory selection criterion: Maintenance period (current or upcoming).
	The query shall return all relevant information about minimum reserve requirements including excess reserve and minimum reserve running average for the whole banking community listing the minimum reserve requirements per CLM account holderparticipant .

Id	CLM.CB.UR.CBS.UI.040
Name	Query penalty
Description	CBS shall provide the function to query penalty regarding minimum reserve infringements on a MCA. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. The user shall specify at least one of the following mandatory selection criteria. Mandatory selection criteria:
	 Either Party BIC or Party Name Maintenance Period (From-To) Penalty Status The query shall return all relevant information about penalties regarding minimum reserve infringement, including: Party BIC





4.4	OLM OR UR OROUNOTO
ld	CLM.CB.UR.CBS.UI.050
Name	Query the usage of marginal lending
Description	CBS shall provide the functionality to query the usage of marginal lending through U2A interface. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers.
	The query shall return all relevant information about marginal lending, including:
	 Party BIC Party Name Marginal Lending Account Total Balance on the Marginal Lending Account

ld	CLM.CB.UR.CBS.UI.060
Name	Query the usage of overnight deposit
Description	CBS shall provide a functionality to query the usage of overnight deposit through U2A interface. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. The query shall return all relevant information about overnight deposit, including: Party BIC Party Name Overnight Deposit Account Total Balance on the Overnight Deposit Account

ld	CLM.CB.UR.CBS.UI.070
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Name	Query aggregated liquidity for all cash accounts (only for Crisis Managers)
Description	CBS shall provide a functionality to query an aggregated liquidity view for all cash accounts (MCA and DCAs) in Euro through U2A interface.
	The query shall provide the possibility for crisis managers to see the balances of all accounts in Euro (activated by the <u>TARGET Service DeskOperator</u> upon crisis manager decision) and aggregated figures for <u>cash transferspayments</u> sorted by their status (including pending).

ld	CLM.CB.UR.CBS.UI.080
Name	Query to request a copy of a Report on minimum reserve information of banking community per MFI
Description	CBS shall provide the functionality to request a copy of a report on minimum reserve information of banking community per MFI and maintenance period through A2A interface. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. The user shall specify either the Party BIC or the Party Name of the MFI Leader.

3.2.2 Action

ld	CLM.CB.UR.CBS.UI.090
Name	Create marginal lending on request
Description	CBS shall provide the functionality to create marginal lending on request through U2A and A2A interface.

ld	CLM.CB.UR.CBS.UI.100
Name	Create minimum reserve requirement
Description	CBS shall provide the functionality to create the minimum reserve requirement of a CLM account holderparticipant through U2A and A2A interface.



ld	CLM.CB.UR.CBS.UI.110
Name	Modify minimum reserve requirement
Description	CBS shall provide the functionality to modify the minimum reserve requirement of a <u>CLM account holder participant</u> through U2A and A2A interface.

	ld	CLM.CB.UR.CBS.UI.120
	Name	Adjust minimum reserve fulfilment
İ	Description	CBS shall provide the functionality to adjust the minimum reserve fulfilment of a CLM account holderparticipant through U2A and A2A interface.

ld	CLM.CB.UR.CBS.UI.130
Name	Authorise penalties
Description	CBS shall provide the possibility to authorise penalties for minimum reserve infringements on MCA through U2A and A2A interface.

ld	CLM.CB.UR.CBS.UI.140
Name	Modify penalties
Description	CBS shall provide the possibility to modify penalties for minimum reserve infringements on MCA through U2A and A2A interface.

ld	CLM.CB.UR.CBS.UI.150
Name	Cancel penalty
Description	CBS shall provide the possibility to cancel penalties for minimum reserve infringements on MCA through U2A and A2A interface.

Query / Action	U2A	A2A
Query Standing Facilities transaction of the respective banking community	х	Х
Query minimum reserve requirements per CLM account holderparticipant	х	Х



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Table 3: Summary of queries and actions in U2A and A2A mode for Central Bank Services

3.3 USER INTERACTION FOR CENTRAL LIQUIDITY MANAGEMENT

The section below describes the user requirements for queries and actions in Central Liquidity Management (CLM) for Central Banks (including the account holder-ewner of the Dedicated Transit Account).

3.3.1 Query

All described queries in this section shall be provided in U2A and A2A mode unless otherwise stated.

ld	CLM CD LID CLM III 040
Id	CLM.CB.UR.CLM.UI.010
Name	Query aggregated available liquidity in CLM for the whole banking community
Description	CLM shall provide a functionality to query an aggregated view of all liquidity for the whole banking community with breakdown per CLM account holderparticipant and per account through U2A interface. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers.
	The query shall return all relevant information for the current business day including:
	 Party BIC Party Name Balance on MCA Credit line on MCA Balance on RTGS DCA Balance on TIPS DCA Balance on T2S DCA
	 Number of transactions on each account Pending transactions (debits and credits)



• Aggregated (overall available liquidity) in CLM

ld	CLM.CB.UR.CLM.UI.020
Name	Query liquidity on Banking Group level
Description	CLM shall provide a functionality to query liquidity on Banking Group level with breakdown per CLM account holderparticipant and per service through U2A interface. The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers.
	Central Banks shall have the possibility to perform the monitoring of Banking Groups (including all cash accounts within all services) following the existing Oversight requirements. The query shall return all relevant information for the current business day, including:
	 Banking Group Identifier Party BIC Party Name Balance on MCA Balance on RTGS DCA Balance on TIPS DCA Balance on T2S DCA Credit Line (on MCA)

ld	CLM.CB.UR.CLM.UI.030
Name	Query liquidity on Banking Group level (activated only upon Crisis Managers decision)
Description	CLM shall provide a functionality to query liquidity on Banking Group level through U2A interface. The query can be activated in crisis situation upon a decision taken by Crisis Managers. The query shall return all relevant information for the current business day, including: Banking Group Identifier Party BIC Party Name Balance on MCA Balance on RTGS DCA



Balance on TIPS DCA
Balance on T2S DCA
Credit line (on MCA)
Pending cash transferspayments (debit and credit)
Overall balance of all accounts
In addition each account balance shall be made available.

ld	CLM.CB.UR.CLM.UI.040
Name	Query cash transferspayments per status for the whole banking community
Description	CLM shall provide the functionality to query the sum of <u>cash</u> <u>transferspayments</u> on the MCA and their respective status on all accounts belonging to the Central Bank's banking community through U2A interface.
	The Central Bank user can query within his data scope/ banking community, which is determined by the Party BICs and MCA numbers. In addition the query shall allow the user to specify any combination of optional selection criteria.
	Optional selection criteria: Message type Priority Debit/Credit Sender BIC Receiver BIC Amount Priority Status
	The query shall return all business attributes of the <u>cash transferspayments</u> per status and the overall amounts for the whole banking community including the processing status.

ld	CLM.CB.UR.CLM.UI.050
Name	Query balances of all Dedicated Transit Accounts
Description	CLM shall provide the functionality to query the balances of all Dedicated
	Transit Accounts in CLM (RTGS, TIPS, T2S) for reconciliation purposes



between CLM and the settlement services through U2A interface.

The query shall return an overview of the balances of all Dedicated Transit Accounts for the current business day including:

- Balance on RTGS Dedicated Transit Account in CLM
- Balance on TIPS Dedicated Transit Account in CLM
- Balance on T2S Dedicated Transit Account in CLM
- Balance of outstanding credit line (on MCAs)
- Overall balance of all Dedicated Transit Accounts

Note: Only <u>the account holderauthorised owner</u> of the Dedicated Transit Account shall have access to this query.

ld	CLM.CB.UR.CLM.UI.060
Name	Query to request a copy of a Report on general ledger
Description	CLM shall provide the functionality to request a copy of a Report on general ledger through A2A interface.

3.3.2 Action

ld	CLM.CB.UR.CLM.UI.070
Name	Create credit line
Description	CLM shall provide the functionality to create a credit line through U2A and A2A interface on MCA.

ld		CLM.CB.UR.CLM.UI.080
Na	ame	Modify credit line
De	escription	CLM shall provide the functionality to modify a credit line through U2A and A2A interface for MCA.

ld	CLM.CB.UR.CLM.UI.090
Name	Create transactioncash transfer



Description	CLM shall provide a functionality to create a cash transfertransaction on the
	MCA through U2A and A2A interface (e.g. Central Bank Operation, Cash
	Withdrawals, Standing Facilities transfers) in contingency situations.

ld	CLM.CB.UR.CLM.UI.100
Name	Release <u>a</u> debit <u>cash transfer orderpayment</u> for/from blocked <u>CLM account</u> <u>holderparticipant</u>
Description	CLM shall provide the functionality to release <u>a</u> debit <u>cash transfers</u> orderpayment for excluded <u>CLM account holdersparticipants</u> through U2A interface.

ld	CLM.CB.UR.CLM.UI.110
Name	Release <u>a credit cash transfer orderpayment</u> for/from blocked <u>CLM account</u> <u>holderparticipant</u>
Description	CLM shall provide the functionality to release <u>a</u> credit <u>cash transfer</u> orderpayment for excluded <u>CLM account holdersparticipants</u> through U2A interface.

ld	CLM.CB.UR.CLM.UI.120
Name	Reserve liquidity on MCA dedicated for seizure
Description	CLM shall provide the function to reserve liquidity on MCA dedicated for seizure based on court decision(s) through U2A interface. Note: The reservation of liquidity on MCA is a tool to handle the blocking of liquidity on the MCA in case of seizure; however the exact handling of seizure is subject matter of local jurisdiction and the respective Central Bank.

ld	CLM.CB.UR.CLM.UI.130
Name	Modify reservation of liquidity on MCA dedicated for seizure
Description	CLM shall provide the function to modify the reservation of liquidity on MCA dedicated for seizure based on court decision(s) through U2A interface.



ld	CLM.CB.UR.CLM.UI.140
Name	Delete reservation of liquidity on MCA dedicated for seizure
Description	CLM shall provide the function to delete the reservation of liquidity on MCA dedicated for seizure based on court decision(s) through U2A interface.

This table shows a summary of the above described queries and actions in U2A and A2A mode for CLM:

Query / Action	U2A	A2A
Query aggregated available liquidity in CLM for the whole banking community	x	
Query liquidity on Banking Group level	х	
Query liquidity on Banking Group level (activated only upon Crisis Managers decision)	x	
Query <u>cash transferspayments</u> per status for the whole banking community	х	
Query balances of all Dedicated Transit Accounts	х	
Query to request a copy of a Report on general ledger		Х
Create/ Modify credit line	х	Х
Create cash transfertransaction	х	х
Release <u>a</u> _debit <u>cash transfer orderpayment</u> for/from blocked <u>CLM</u> <u>account holderparticipant</u>	х	
Release <u>a credit cash transfer orderpayment</u> for/from blocked <u>CLM</u> <u>account holderparticipant</u>	х	
Reserve liquidity on MCA dedicated for seizure	х	
Modify/ Delete reservation of liquidity on MCA dedicated for seizure	×	_

Table 4: Summary of queries and actions in U2A and A2A mode for Central Liquidity Management



4 BUSINESS DATA DEFINITIONS

4.1 ATTRIBUTES AND ENTITIES

ld	CLM.CB.UR.BDD.010
Name	Reserve Maintenance Period
Description	Period over which compliance with reserve requirements is calculated.
	Mandatory attributes:
	Start of Reserve Maintenance Period
	Optional attributes:
	End of Reserve Maintenance Period

ld	CLM.CB.UR.BDD.020
Name	Marginal Lending Interest Rate
Description	Interest rate applied to a marginal lending transaction.
	Mandatory attributes:
	Marginal Lending Interest Rate
	Valid From Date
	Optional attributes:
	Valid To Date

ld	CLM.CB.UR.BDD.030
Name	Overnight Deposit Interest Rate
Description	Interest rate applied to an overnight deposit.
	Mandatory attributes:
	Overnight Deposit Interest Rate
	Valid From Date
	Optional attributes:
	Valid To Date



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