



Target Consolidation Training

Virtual Info session n°07 How to manage liquidity on CLM?

2021-11-23

9h30 – 12h WEBEX EVENT



Event rules

| Join Event Now | | | | | | | | |
|--|-------|--|--|--|--|--|--|--|
| To join this event, provide the following information. | | | | | | | | |
| First name: | | | | | | | | |
| Last name: | | | | | | | | |
| Email address: | | | | | | | | |
| Event password: | ••••• | | | | | | | |





6. **Q&A**

- Make sure you respect the naming convention
 - First name = Full name (first name + last name)
 - Last name = Bank name
 - Email = Professional email address
- Camera off by default
- Microphone off by default
- Questions allowed in the chat or by raising hand
 - In case of too many questions, send your question to Target.conso@bcl.lu
- Do not forget to lower hand after having asked a question



Training agenda

| | | TARGET CONSOLIDATIO BCL Training sessions for future MC/ 2021 Program | DN PROJECT A holders in Lux m | embourg | | | |
|----|-------------------------------------|---|-------------------------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|
| | | What ? | When ? | How long ? | | Who attends ? | |
| n° | Торіс | details | Event Date 2021 | Session format | Configuration A A2A + U2A | Configuration B U2A only | Configuration (Co-managed |
| 1 | Registration forms | How to fill in the form and send it to the BCL ? | 28-sept Postponed | 1h morning Session | YES | YES | YES |
| 2 | Connectivity | Focus on connectivity testing and upcoming milestones | 28-sept | 1h morning Session | YES | YES | NO |
| 3 | Introduction - Basic concepts | Vision 2020, ESMIG, A2A vs U2A, MCA vs DCA | 17-nov | 1h morning Session | YES | YES | YES |
| 4 | Introduction - Business day | New Business day in TARGET services | 17-nov | 1h morning Session | YES | YES | Optional |
| 5 | CRDM Reference data - Basics | Account details and how to create users ? How to assign roles and privileges ? | 22-nov | 1h morning Session | YES | YES | NO |
| 6 | CRDM Reference data - Configuration | How to configure my account ? How to set-up reports and messages ? | 22-nov | 1h morning Session | YES | YES | NO |
| 7 | CLM - Liquidity management | How do I manage my liquidity in CLM? | 23-nov | 1h morning Session | YES | YES | NO |
| 8 | CLM - CB services | Central bank services: Minimum reserves, Standing Facilities, etc | 23-nov | 1h morning Session | YES | YES | NO |
| 9 | CLM - ISO 20022 messages | Focus on CLM ISO 20022 key messages | 23-nov | 1h morning Session | YES | NO | NO |
| 10 | RTGS - Liquidity management | How to manage liquidity on RTGS? Interaction with other services | 24-nov | 1h morning Session | YES if RTGS | YES if RTGS | NO |
| 11 | RTGS - Payments | How do I instruct a payment? | 24-nov | 1h morning Session | YES if RTGS | YES if RTGS | NO |
| 12 | RTGS - ISO 20022 messages | Focus on RTGS ISO20022 key messages | 24-nov | 1h morning Session | YES if RTGS | NO | NO |
| 13 | Testing and migration | Testing and migration in 2022 | 25-nov | 1h morning Session | YES | YES | NO |
| 14 | Additionnal features | Billing, datawarehouse | 25-nov | 1h morning Session | YES | YES | NO |
| 15 | Co-management | Focus on co-manager activities | 26-nov | 1h morning Session | YES if co-manager | YES if co-manager | Optional |
| 16 | Co-management | Focus on co-managees activities | 26-nov | 1h morning Session | Optional | Optional | YES |

Agenda

- 0. Welcome
- 1. Introduction
- 2. Available Liquidity & Liquidity Reservation
 - 2.1 Overview
 - 2.2 U2A Liquidity reservation
 - 2.3 A2A Liquidity reservation
- 3. Floor/ceiling

4. Liquidity transfers

- 4.1 Overview
- 4.2 Liquidity Transfer Group LTG
- 4.3 Immediate liquidity transfers
- 4.4 Automated liquidity transfers
- 4.5 Standing orders for liquidity transfers
- 4.6 Rule-based liquidity transfers
- 5. Liquidity monitoring
 - 5.1 Overall liquidity monitoring
 - 5.2 Statement of account
 - 5.3 Account Monitoring Group AMG
- 6. Closing of the event





1. Introduction



1. Introduction

CLM is one of the core T2 services where:

- Participants can manage liquidity
- Central bank operations take place
- All participants have a Main Cash Account

| ESMIG (ISO20022 ma | essages and GUIs acces | ss) | New GUI |
|----------------------|-------------------------|----------------------|----------------------|
| Ţ | $\overline{\mathbf{v}}$ | \Box | - |
| CLM New GUI | RTGS New GUI | T2S Existing GUI | TIPS Existing GUI |
| New MCA | RTGS DCA | T2S DCA | TIPS DCA |
| DCAs funding | Target Payments | DVPs | Instant |
| Operations with BCL | | Settlement | Payments |
| Minimumreserves | | | |
| Marginal Lending | | | |
| Overnight deposits | | | |
| Specific static data | Specific static data | Specific static data | Specific static data |
| | | | |
| Common Reference | Data Management (CRI | (MC | New GUI |
| Billing (BILL) | | | New GUI |
| Datawarehouse (DW | H) | New GUI | |
| Business Day Manag | gement (BDM) | New GUI | |
| ECONS II | New GUI | | |



1. Introduction

CLM offers a centralised mechanism to manage and monitor liquidity





2. Available Liquidity & Liquidity Reservation



2. Available Liquidity & Liquidity Reservation 2.1 Overview

- Available liquidity = Positive account balance + Credit line
- Central Bank Operations (CBOs) will settle in the Main Cash Account (MCA)
- Liquidity can be reserved for CBOs (optional) during all day (excluding maintenance window)
- Current reservations (effective immediately) vs Standing order reservations (effective next BD)
- Reservations can be made in U2A and in A2A see next slides



2. Available Liquidity & Liquidity Reservation 2.2 U2A Liquidity reservation *immediate* How to reserve liquidity in U2A?

- <u>CLM</u> GUI path: Liquidity Management Features >> Reservations Query
- Privileges: CLM_QueryCurReservation
- Screen: Reservations Query

| | | Query Reservations Query Reservations | | | ☆ | ? | ٠ | Ģ |
|---------|-------------|--|-------------|----------|---|---|---|---|
| - Searc | ch Criteria | | | | | | | |
| - | Reservation | 5 | | | | | | |
| | Account Nu | mber | Account BIC | | | | | |
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2. Available Liquidity & Liquidity Reservation 2.2 U2A Liquidity reservation *immediate* How to reserve liquidity in U2A?

- CLM GUI path: After clicking Submit in the previous screen, the Display reservations screen allows to modify/enter a new reservation
- Privileges: CLM_ModifyCurReservation
- Screen: Reservations Display

| | | | ٥ | Display Reserv | vations | | | | | | | 습 | ? | ٠ | ወ |
|---|-------|------------|---------|--------------------|--------------------|--------------------------|------------------|---------------|-------------|-------------------|------------------------|---|---|---|-----|
| + | Searc | h Criteria | | | | | | | | | | | | | |
| - | Resu | ts | | | | | | | | | | | | | |
| | Acco | unt Inforr | nation | | | | | | | | | | | | |
| | Party | BIC | | | | Account Number | | | Account BIC | | | | | | |
| | PBA | ACDF0008 | l. | | | MACASHPBAACDF0008EUR0008 | | | PBAACDF0009 | | | | | | |
| | Rese | vation fo | r Centr | al Bank Operations | | | | | | | | | | | |
| | Rest | rvation A | mount | 1 | Pendi | ing Reservation | | Defined Value | : | | New Reservation Amount | | | | |
| | | | | | 20,000,000.00 EUR | | 5,000,000.00 EUR | | | 15,000,000.00 EUR | | | | | EUR |
| Г | Rese | vation fo | r Seizu | re of Funds | | | | | | | | | | | |
| | Rese | rvation A | mount | 1 | Pendi | ing Reservation | | Defined Value | 2 | | New Reservation Amount | | | | |
| | СВ | ΟΝΙ | Y | | 10,000,000.00 EUR. | | 0.00 EUR | | | 10,000,000.00 EUR | | | | | EUR |
| | Sut | mit | Reset | 1 | | | | | | | | | | | |



2. Available Liquidity & Liquidity Reservation 2.2 U2A Liquidity reservation – standing order How to reserve liquidity in U2A?

- CRDM_GUI path: T2 >> Cash >> Standing Order for Reservation >> New/Edit
- > Privileges: Create Standing Order for Reservation & Update Standing Order for Reservation
- Screen: Standing Order for Reservation new/edit

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2. Available Liquidity & Liquidity Reservation 2.3 A2A Liquidity reservation

Liquidity reservations can be managed in A2A using the following messages:

| Message type | Use case | Sent by |
|-----------------------------|--|-----------------|
| comt 046 CotPosonyation | Request details of one or more current reservation(s) set on | |
| Camelou Gerkeservation | CLM MCA(s) on the current business day | Business sender |
| | Provide details of one or more current reservation(s) set on | |
| camt.047 ReturnReservation | the requested CLM MCA(s), or information that no current | |
| | reservation is defined | CLM |
| | Used to (i) create/modify a current reservation (in CLM) | |
| camt.048 ModifyReservation | (ii) modify standing order for reservation (in CRDM) | |
| | during the current business day | Business sender |
| camt 040 DeleteReconversion | Used to delete the current reservation during the current | |
| Callereservation | business day | Business sender |

Detailed information is available in the CLM UDFS chapter 12. List of messages







- The set up is done in CRDM
- Two options that can be combined:
- 1. Breach notifications
 - A2A (camt004), or
 - alert in U2A
- <u>VS</u>
- 2. Rule based Liquidity transfers (see 4.6)
- Floor/ceiling amount vs Target amount
- ➢ Liquidity transfers will NOT trigger a check for floor/ceiling breach.
- Already notified breaches will not be notified again

Example of floor/ceiling on MCA



How to set up floor/ceiling in U2A?

CRDM_GUI path: Common >> Cash >> Cash Accounts >> Search

- Privileges: Cash Account list query
- Screen: Cash account List

| 20 🐔 🔪 Co | mmon 🔪 Cast | n 🔪 Cash Acco | unts 🔪 Q Sea | rch | | | | | | 8 | 2 | | | | | |
|--------------------|-------------|-----------------|--------------|-------------|-----------|----------------------|-----------------|-----|----------|------------|---------|------|---|-----------|--------------|-------|
| | CASH AC | COUNT L | IST — | | | | | | | | | | | - | | |
| Status: | | | Active | | ~ | Cash Account Number: | | | | | | | | | | |
| Account Type: | | | All | | ~ | Linked Account: | | | | | | | | | | |
| Parent BIC: | | | Choose BIC | | | Party BIC: | | | Choo | ose BIC | | | | | | |
| Party Type: | | | All | | ~ | Currency: | | | All | | | | ~ | | | |
| Opening Date Fro | om: | | yyyy-mm-dd | ť | 1 | Opening Date To: | | | <u> </u> | mm-dd | | 曲 | 0 | click or | n Edit bı | utton |
| Closing Date From: | | | yyyy-mm-dd | t | 0 | Closing Date To: | | | <u> </u> | mm-dd | | 曲 | Θ | | | |
| Q Search | × Reset | | | | | | | | | | | + Ne | ~ | | \downarrow | _ |
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| Status ≡ | Cash Ac≡ | Account ≡ | Linked ≡ | Parent ≡ | Party BIC | ≡ Party Short ≡ | Party Ty…≣ | CUR | ≡ | Opening≡ | Closing | J E | | | Delete | |
| Active | ACT TEST DC | T2S Dedicated | PBBKITRR102 | NCBXITRR00' | PBBKITRE | 102 PB OF NCBXITRR | Payment Bank | EUR | | 2019-10-31 | 2019-1 | 1-01 | ^ | | | |
| Active | ANSYTECHAC | Ancillary Syste | | NCBXITRR00 | ASIKITRR | 200 Test CSLD ASI | Ancillary Syste | EUR | | 2019-10-11 | 2020-0 | 6-12 | | () | Restore | |
| Active | ANSYTECHAC | Ancillary Syste | | NCBXITRR00' | ASIKITRR | 200 Test CSLD ASI | Ancillary Syste | EUR | | 2020-04-07 | 2020-0 | 5-31 | | \sim | | |
| Active | ANSYTGUAR | Ancillary Syste | | NCBXITRR00' | ASIKITRR | 200 Test CSLD ASI | Ancillary Syste | EUR | | 2020-06-15 | 2020-0 | 6-30 | | (\circ) | Details | |
| Active | BR Testing | Marginal Lendi | MCAACCOUN | TCSOTCS0XX | NCBXITRE | R00' NCB of N8IT | National Centr | EUR | | 2020-06-22 | 2020-0 | 6-26 | | ŏ | | |
| Active | CONTINGENC | Contingency A | | NCBXITRR00 | PMBKITRF | R20 Test CSLD PMBK | Payment Bank | EUR | | 2019-09-16 | 2019-0 | 9-25 | | | Revisions | |
| Active | CONTINGENC | Contingency A | | NCBXITER00 | PMRKITRE | 201 Test CSLD PMRK | Payment Bank | FUR | | 2019-09-27 | 2020-0 | 8-03 | | | | |

How to set up floor/ceiling in U2A?

- CRDM GUI path: After clicking Edit in the previous screen, the Edit screen allows to modify/enter a new floor/ceiling
- Privileges: Update Cash Account
- Screen: Cash account Edit

| | t | | BCEEadmin 2021-11-19 07:49:5 Session ID: eyjhbGciOjIU21Nij9 Business D | 2 > ? Help > 🔓 Logout Nate: 2021-11-19 Stage: EAC vers | ion: 1.1.11 | | |
|---|---------------------------------|---------------------------|---|--|---------------------|----------------|---------|
| 2 🌒 🌴 🔪 Common 🔪 C | ash 🔪 Cash Accounts 🔪 🔍 Sear | ch 🔪 🗭 Edit | | | B \$ | | |
| Parent BIC: | BCLXLULLXXX | | BIC: | BCEELULLOO | (| | |
| Short Name: | BCEE | | Party Type: | РМВК | | | |
| Floor notification Amount: | | 1,000,000 | Ceiling notification Amount: | | 100,000,000 | | |
| urrency: | Euro | ~ | | | | | |
| inked Account Type: | | ~ | Linked Account Reference: | | | + Submit | |
| Account Threshold Configure | ition | | | | | S Reset | |
| | | | | | | × Cancel | |
| Target Amount after Breaching | Floor: | 100,002 | Target Amount after Breaching Ceiling: | | 100,000,002 | Can only be up | dated i |
| Associated LT Account: | RLUEURBCEELU | LLXXXB00001RTGSEACE | | | | | |
| Floor Notification: | | | Ceiling Notification: | | | | |
| Ruled-based LT for Queued High Payments: | n Priority | | Ruled-based LT for Queued Urgent Prio Payments: | ity 🗌 | | | |
| | | | | | × + | | |
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| Target Amount After ≡ Ta | arget Amount After = Associated | LT Acco ≡ Floor Notificat | tion = Ceiling Notification = | Rule-based LT for ≡ | Rule-based LT for ≡ | | |

How to set up floor/ceiling in A2A?

- acmt.015 AccountExcludedMandateMaintenanceRequest can be used to instruct an update of the attributes related to floor/ceiling notification amounts*
- CRDM will send in return:
 - acmt.010 AccountRequestAcknowledgement when the update of the Cash Account has been successfully processed or queued
 - acmt.011 AccountRequestRejection when the update has been rejected.
- > Detailed information is available in the CLM UDFS chapter 12. List of messages

* Target floor and target ceiling amount can only be updated in U2A







4. Liquidity Transfers4.1 Overview

| Types | Description |
|--|--|
| Immediate liquidity transfers | Immediate transfer of liquidity initiated by the account holder or another authorised CLM actor in A2A or U2A |
| Standing orders for liquidity transfers | Recurring transfer of liquidity processed every business day at certain business day events (configuration done in CRDM) |
| Rule-based liquidity transfers | Transfer of liquidity initiated by CLM due to a floor or ceiling rule (configuration done in CRDM) |
| Automated liquidity transfers | Transfer of liquidity initiated by CLM sent to RTGS in order to transfer liquidity from the linked RTGS DCA due a queued/pending CBO (mandatory) |



4. Liquidity Transfers4.1 Overview

- > Liquidity transfers can either
- push liquidity to another cash account or
- pull liquidity from another cash account

| Liquidity transfer type | Initiator | Use case | Push/Pull | Counterpart cash account in | Notes |
|---|-----------|---------------|--------------|--------------------------------|---------------|
| | | Intra-service | Push | CLM | LTG necessary |
| Immediate liquidity transfer order | CLM Actor | Inter-service | Push | RTGS, TIPS, T2S | None |
| | | Inter-service | Pull | RTGS, TIPS, T2S | U2A only |
| Automated liquidity transfer order | | Inter-service | Pull | RTGS | Mandatory |
| Rule-based liquidity transfer order | System | Intra-service | Push or pull | CLM | None |
| | | Inter-service | Push or pull | RTGS | None |
| | | Intra-service | Push | CLM | LTG necessary |
| Standing order liquidity transfer order | | Inter-service | Push | RTGS, TIPS, T2S | None |



4. Liquidity Transfers4.2 Liquidity Transfer Group - LTG

How to request a LTG set-up?

- > LTG is a precondition for intra-service liquidity transfers
- > On an optional basis the participant(s) can request their central bank to group accounts in a LTG
- > LTG <u>is needed</u> even if the accounts belong to the same party
- > LTG is not needed if one of the accounts involved in a liquidity transfer is a central bank account
- A LTG can be set-up cross-border:

For example if three banks in three different countries (A, B and C) want to create a LTG:

- 1. Bank A request NCB A to create the LTG with Bank A only
- 2. Bank B requests NCB B to add Bank B in the LTG
- 3. Bank C asks NCB C to add Bank C in the LTG



4. Liquidity Transfers4.2 Liquidity Transfer Group - LTG

Examples



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4. Liquidity Transfers4.3 Immediate Liquidity Transfers

How to initiate LTs in U2A?

- <u>CLM</u> GUI path: Liquidity >> Liquidity Transfer New
- Privileges: CLM_IniImLiquiTrans
- Screen: Liquidity Transfer New

| ≡ | | New Liquidity Transfer New Liquidity Transfer | | 습 | ? | ٠ | ወ |
|--------|-------|--|-------------------|---|---|---|---|
| | | Liquidity Transfer Account Information | | | | | |
| | | Debit Account | Credit Account | | | | |
| | | Account Number" | Account Number" | | | | |
| | | Q | Q. | | | | |
| | | Display Liquidity | Display Liquidity | | | | |
| | | Liquidity Transfer Details | | | | | |
| | | Amount" | End To End ID* | | | | |
| | | EUR | | | | | |
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| Submit | Reset | | | | | | |
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4. Liquidity Transfers4.3 Immediate Liquidity Transfers

How to initiate LTs in A2A?

- > LTs are initiated using the <u>camt.050</u> LiquidityCreditTransfer message
- > The participant receives in return a <u>camt.025</u> Receipt message
- The participant owing the credited account can optionally subscribe to a <u>camt.054</u> to be notified of the credit



The camt.050 is always sent to the service of the debited account The camt.025 is generated by the service where the camt.050 was sent to

e.g. transfer liquidity a MCA to a RTGS DCA:

- the TO part of the *head.001* linked to the camt.050 must contain the CLM BIC i.e. TRGTXEPMCLM
- the FROM part of the *head.001* linked to the camt.025 will also contain the CLM BIC



4.3 Immediate Liquidity Transfers

How to initiate LTs in A2A?



4.3 Immediate Liquidity Transfers

How to initiate LTs in A2A?

Example of camt.050 For illustration purposes

- <AppHdr xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">

- <Fr>

- <FIId>

- <FinInstnId>
 - <BICFI>BCLXLULLXXX</BICFI>
 - <ClrSysMmbId>
 - <MmbId>UBCL-bcl-02</MmbId>
 - </ClrSysMmbId>
- </FinInstnId>
- </FIId>

</Fr>

- <To>
 - <FIId>
 - <FinInstnId>
 - <BICFI>TRGTXEPMCLM</BICFI>
 - </FinInstnId>
 - </FIId>
 - </To>
 - <BizMsgIdr>BOXFJ783vu39VczD</BizMsgIdr> <MsgDefIdr>camt.050.001.05</MsgDefIdr> <CreDt>2021-11-16T13:42:09Z</CreDt>
 - and lides
- </AppHdr>



4.3 Immediate Liquidity Transfers

How to initiate LTs in A2A?

Example of camt.050 For illustration purposes

- <Document xmlns="urn:iso:std:iso:20022:tech:xsd:camt.050.001.05">
 - <LqdtyCdtTrf>
 - <MsgHdr>
 - <MsgId>NONREF</MsgId>
 - </MsgHdr>
 - <LqdtyCdtTrf>
 - <LqdtyTrfId>
 - <InstrId>TEST CLM T LIIE</InstrId>
 - <EndToEndId>PUSH LT CLM TO RTGS</EndToEndId>
 - </LqdtyTrfId>
 - <CdtrAcct>
 - <Id>
 - <Othr>

<Id>RLUEURBCLXLULLXXXB00000BCLXLULLXXX</Id>

- </Id>
- </CdtrAcct>
- <TrfdAmt>
 - <AmtWthCcy Ccy="EUR">20</AmtWthCcy>
 - </TrfdAmt>
- <DbtrAcct>
 - <Id>
 - <Othr>
 - <Id>MLUEURBCLXLULLXXXB00000BCLXLULLXXX</Id>
 - </Othr>
 - </Id>
- </DbtrAcct>
- </LqdtyCdtTrf>
- </LqdtyCdtTrf>
- </Document>



How to initiate LTs in A2A?

Main elements of the camt.025 message







For illustration purposes

```
- <AppHdr xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
   - <Fr>
      - <FIId>
          - <FinInstnId>
               <BICFI>TRGTXEPMCLM</BICFI>
           </FinInstnId>
        </FIId>
     </Fr>
   - <To>
      - <FIId>
          - <FinInstnId>
               <BICFI>BCLXLULLXXX</BICFI>
           </FinInstnId>
        </FIId>
     </To>
     <BizMsgIdr>109900</BizMsgIdr>
     <MsgDefIdr>camt.025.001.05</MsgDefIdr>
     <CreDt>2021-11-16T13:51:21.277Z</CreDt>
   - <Sgntr>
      - <ds:Signature Id=" e3f22221-5d3c-44df-8f27-c69e82cd6487" xmlns:ds="http://ww
```



4.3 Immediate Liquidity Transfers

How to initiate LTs in A2A?

Example of camt.025 For illustration purposes

- <Document xmlns="urn:iso:std:iso:20022:tech:xsd:camt.025.001.05">
 - <Rct>
 - <MsgHdr>
 - <MsgId>NONREF</MsgId>
 - <ReqTp>
 - <Prtry>
 - <Id>SSTS</Id>
 - </Prtry>
 - </ReqTp>
 - </MsgHdr>
 <RctDtls>
 - <RctDtls> - <OrgnlMsgId>
 - <MsgId>BOXFJ783vu39VczD</MsgId>
 - </OrgnlMsgId>
 - <ReqHdlg>
 - <StsCd>SSET</StsCd>
 - </ReqHdlg>
 - </RctDtls>
 - </Rct>
- </Document>



4. Liquidity Transfers4.4 Automated Liquidity Transfers

- Relevant <u>only</u> for participants having at least one RTGS DCA
- CB links 1:1 the MCA and the RTGS DCA in CRDM (precondition for automated LTs)
- In case of <u>insufficient liquidity on the MCA</u> for the settlement of <u>central bank operations</u> (CBOs) or <u>seizure of funds</u> the missing liquidity will be pulled from the linked RTGS DCA
- An automated LT is created and sent to RTGS
- ➢ If there are <u>no funds in the RTGS DCA</u>:
 - The automated LT is placed on top of the queue with highest priority
- ➢ If there are insufficient funds in the RTGS DCA:
 - The automated LT settles partially
 - A new automated LT for the unsettled amount is created and placed on top of the queue.
- ➢ If <u>funds arrive in the MCA</u> the automated LT is deleted.



4. Liquidity Transfers4.5 Standing Orders for Liquidity Transfers

- Standing order for LTs:
 - <u>recurring</u> order to transfer liquidity
 - <u>once</u> per business day;
 - at a <u>configured</u> business day event;
 - with a <u>defined</u> amount of liquidity;
 - from an <u>MCA</u> to another cash account
- Set up in CRDM
- Changes will be valid as of the next business day
- Use cases in CLM (relevant for payment banks):
 - Intra-service: MCA -> MCA (within a Liquidity Transfer Group)
 - Intra-service: MCA -> Overnight Deposit Account
 - Inter-service: MCA -> Cash account in another service (i.e. RTGS, T2S, TIPS)
- > In case of insufficient funds on the MCA
 - a partial execution is possible (also with the amount 0,00 €).
 - standing orders with the same execution event will be processed "pro rata".
 - the amounts not processed due to partial execution will not be queued (i.e. no further processing)

4. Liquidity Transfers 4.5 Standing Orders for Liquidity Transfers

How to set-up a standing order for LTs in U2A?

- CRDM GUI path: Common >> Cash >> Standing/Predefined Liquidity Transfer Order >> New OR Common >> Cash >> Standing/Predefined Liquidity Transfer Order >> Search >> click on New
- Privileges: Create Liquidity Transfer Order, Update Liquidity Transfer Order
- Screen: Standing/Predefined Liquidity Transfer Order new/edit

| Common Cash Stan | ding/Predefined Liquidity Transfer | Order + New | 50 | |
|-------------------------------|------------------------------------|-------------------------|----------------|-----|
| STANDING/P | REDEFINED LIQUID | ТҮ —— | | _ |
| Order Reference: | | | | |
| Valid From: | yyyy-mm-dd 🗰 | Valid To: | yyyy-mm-dd 🗰 🔇 | (+) |
| Amount: | | Currency: | | 5 |
| Dedicated Amount: | Г | All Cash: | П | |
| Order Type: | | • | | |
| Event Type: | | Execution Time: | 0:00 | |
| Creditor Account Type: | | • | · · · | |
| Creditor Cash Account Number: | Choose | Debited Cash Account Nu | mber: Choose | |
| AS Procedure: | | Ŧ | | |
| lect "Standing" as order t | ype | | | |

4. Liquidity Transfers4.6 Rule-based Liquidity Transfers

- > Transfer of liquidity initiated by CLM due to a floor or ceiling rule
- Can be related with different MCAs and/or RTGS DCAs also belonging to different parties.
- Rule-based liquidity transfer orders for floor breach and ceiling breach can be set-up independently.
- > *Precondition:* There is already a ceiling/floor rule defined for the account
- Breach of the floor amount
- CLM pulls liquidity from the linked account to reach the pre-defined target floor amount
- If insufficient liquidity on the defined account the LT settles partially <u>without</u> further settlement attempt
- Breach of the ceiling amount
- CLM pushes liquidity towards the linked account
- The amount to be transferred is the difference between the currently available liquidity on the MCA and the predefined target ceiling amount.

4. Liquidity Transfers4.6 Rule-based Liquidity Transfers

How to set-up rule-based LTs in U2A?

- CRDM GUI path: Common >> Cash >> Standing/Predefined Liquidity Transfer Order >> New
- > Privileges: Create Liquidity Transfer Order, Update Liquidity Transfer Order
- Screen: Standing/Predefined Liquidity Transfer Order new/edit

| 🛪 🔪 Common 🔰 Cash 🔪 Standi | ng/Predefined Liquidity | Transfer Order | + New | \$ | |
|-------------------------------|-------------------------|----------------|------------------------------|----------------|----------|
| STANDING/PF TRANSFER O | REDEFINED LIC | YTIDIUG | | | _ |
| Order Reference: | | | | | |
| Valid From: | yyyy-mm-dd | # O | Valid To: | yyyy-mm-dd 🗰 🛇 | + Submit |
| Amount: | | | Currency: | | 5 Reset |
| Dedicated Amount: | Π | | All Cash: | F | Cancel |
| Order Type: | | • | | | |
| Event Type: | | ¥ | Execution Time: | | |
| Creditor Account Type: | | • | | | |
| Creditor Cash Account Number: | Choose | | Debited Cash Account Number: | Choose | |
| AS Procedure: | | ~ | | | |
| ect "Rule-based floor" or "Ru | le-based ceiling | " as order t | уре | | |



5. Liquidity monitoring



How to monitor liquidity in U2A?

1. Monitoring cash account liquidity in CLM

- CLM GUI path: Liquidity >> CLM Cash Account Liquidity
- Privileges: CLM_QueryAvaLiq
- Screen: CLM Cash Account Liquidity Query

| ≡ | | | Query CLM Cash Account Liquidity Query CLM Cash Account Liquidity | | 습 | ? | ٠ | |
|------|-------|-------------|--|-------------|---|---|---|---|
| — s | earch | Criteria | | | | | | |
| | - (| Seneral* | | | | | | |
| | ŕ | Account Nur | nber | Account BIC | | | | |
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| Subm | R. | Reset | | | | | | _ |



How to monitor liquidity in U2A?

1. Monitoring cash account liquidity in CLM

- CLM GUI path: Liquidity >> CLM Cash Account Liquidity Query Screen >> [Submit]
- Privileges: CLM_QueryAvaLiq
- Screen: CLM Cash Account Liquidity Display screen

| Ξ | Display CLM Cash Account Liquidity Query CLM Cash Account Liquidity | | | ድ ? 💠 🙂 |
|---------|--|------------|-----------------------------------|--|
| + Searc | rch Criteria | | | |
| - Resul | ults | | | Last Refresh: 2021-10-29 11:25:23 CEST Refresh |
| Acco | ount Information | | | |
| Party | | Party Name | Account Number | Account BIC |
| occ | | | medelindezedebologodo reambledeze | JULIUS COMA |
| Liqui | udity information | | | |
| | Starting Balance | | | 456,647.13 EUR |
| Settle | led Cash Transfers | | | |
| | Settled Debit Liquidity Transfers | | | 0.00 EUR |
| | Settled Credit Liquidity Transfers | | | 0.00 EUR |
| | Settled Debit Payments | | | 0.00 EUR |
| | Settled Credit Payments | | | 0.00 EUR |
| | Current Balance | | | 456,647.13 EUR |
| | Credit Line | | | 2,090,073,135.24 EUR |
| | Available Liquidity | | | 2,090,529,782.37 EUR |
| Queu | rued Cash Transfers | | | |
| | Queued Debit Payments | | | 0.00 EUR |
| | Queued Credit Payments | | | 0.00 EUR |
| | Pending Credit Line Changes | | | 0.00 EUR |
| | | | | |

How to monitor liquidity in U2A?

1. Monitoring cash account liquidity in CLM

- <u>CLM</u> GUI path: Liquidity >> CLM Cash Account Liquidity Query Screen >> [Submit]
- Privileges: CLM_QueryAvaLiq
- Screen: CLM Cash Account Liquidity Display screen

continues from previous slide

| Earmarked Cash Transfers | |
|--|----------------------|
| Earmarked Debit Cash Transfers | 0.00 EUR |
| Earmarked Credit: Cash Transfers | 0.00 EUR |
| Projected Liquidity | 2,090,529,782.37 EUR |
| Reservations | |
| Reservations for Central Bank Operations | 0.00 EUR |
| Reservations for Seizure of Funds | 0.00 EUR |
| Pending Reservations | |
| Reservations for Central Bank Operations | 0.00 EUR |
| Reservations for Seizure of Funds | 0.00 EUR |
| Floor/Ceiling Information | |
| Root Threshold | 0.00 EUR |
| Celling Threshold | 0.00 EUR |
| New Liquidity Transfer Order Create/Modify Credit Line CB only | |



How to monitor liquidity in U2A?

2. Overall liquidity monitoring

- <u>CLM</u> GUI path: Liquidity >> Dashboard Liquidity Overview
- Privileges: CLM_QueryAvaLiq
- Screen: Dashboard Liquidity Overview Query Screen (CB screen, participants do not have access to all the selection options)

| ≡ | 8 | Query Dashboard Liquidity Overview | | | | | | ☆ | ? | ٠ | ወ |
|--------|---------|------------------------------------|---------------------------------|----------|-----------------------|-----------|---------------------------|---|---|-----|--------|
| - See | irch Cr | Viteria | | | | | | | | | |
| - | Q., | wery Content | | | | | | | | | |
| | A | Account Selection | × | | | | | | | | |
| - | Ao | ccount Selection | | | | | | | | | |
| | M | CAs | RTGS DCAs | | Sub Accounts | | TIPS Accounts | | | | |
| | | No filter selected Q S | ct No filter selected | Q Select | No filter selected | Q. Select | No filter selected | | | ۹ 🗆 | Select |
| | T25 | IS DCAs | AS Technical Accounts | | AS Guarantee Accounts | | C8 Accounts | | | | |
| | | No filter selected Q S | ct No filter selected | Q Select | No filter selected | Q, Select | No filter selected | | | ۹ 🗆 | Select |
| | Tra | ansit Accounts | CB ECB Accounts | | EC8 Mirror Accounts | | Marginal Lending Accounts | | | | |
| | | No filter selected Q S | ct No filter selected | Q Select | No filter selected | Q, Select | No filter selected | | | ۹ 🗆 | Select |
| | Ov | vernight Deposit Accounts | CLM Technical Accounts ECONS II | | | | | | | | |
| | | No filter selected Q S | ct No filter selected | Q Select | | | | | | | |
| | 9t/ | yle Selection | Sort by | | Sort order | | Grouped by | | | | |
| | D | Dashboard View | ✓ Party | ~ | Ascending | ~ | Services | | | | \sim |
| - | Ao | ccount Monitoring Group | | | | | | | | | |
| | Act | ccount Monitoring Group ID | Style Selection | | Sort by | | Sort order | | | | |
| | | | Dashboard View | ~ | Party | ~ | Ascending | | | | \sim |
| | Gro | rouped by | | | | | | | | | |
| | Se | iervices | × | | | | | | | | |
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| - | Dar | anking Group | Read and a | | | | | | | | |
| | | his filter selected | 3 Accession | ×. | | | | | | | |
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| School | | Decot | | | | | | | | | — |
| soome | | - NOR | | | | | | | | | |

How to monitor liquidity in U2A?

2. Overall liquidity monitoring

- CLM GUI path: Liquidity >> Dashboard Liquidity Overview
- Privileges: CLM_QueryAvaLiq
- Screen: Dashboard Liquidity Overview Account Sel. grouped by Services Display Screen (CB screen, participants do not have access to all the listed information)

| ≡ | Display Dashboard Liqui Query Dashboard Liquidity Overview | idity Overview Account Selection grouped by Services | | 슙 | ? | ٠ | ወ |
|---------|---|--|-----------------------------|---------------|------------|-----------------|-----|
| + Searc | ch Critteria | | | | | | |
| - Resul | lts | | Last Refe | hesh: 2021-09 | 27 14:47:1 | CEST Refresh | a l |
| - | CLM | 1.660,000,000.00 BUR | Aggregated View | | | | |
| | Liquidity Information CLM | | Available Liquidity in CLM | | 1,66 | 0,000,000.00 EU | ж |
| | | | Available Liquidity in RTG5 | | 60 | 0,000,000.00 EU | R |
| | Contract Science | 100,000,000 00 00 00 00 00 00 00 00 00 00 | Available Liquidity in TIP5 | | | 5,000,000.00 EU | R |
| | Crarit Line | 80,000,000,00 204 | Available Liquidity in T25 | | 50 | 0,000,000.00 EU | ~ |
| | Seizure of Funds | 0.00 BUR | Available Liquidity Overall | | 2,82 | 5,000,000.00 EU | R |
| | Available Liquidity | 100,000,000,00,011 | Current Liquidity Overall | | 2,66 | 5,000,000.00 EL | * |
| | Queued Debit Cash Transfer Orders | -20.000.000 00 80% | | | | | |
| | Queued Credit Cash Transfer Orders | 10,000,000.00 BUR | | | | | |
| | Earmarked Debit Cash Transfer Orders | -20,000,000.00 EUR | | | | | |
| | Earmarked Credit Cash Transfer Order | s 30,000,000.00 BUR | | | | | |
| | Projected Liquidity | 180,000,000.00 EUR | | | | | |
| | - MCA2 | | | | | | |
| | Current Balance | 200,000,000.00 EUR | | | | | |
| | Credit Line | 80,000,000,000 BUR | | | | | |
| | Seizure of Funds | 0.00 BUR | | | | | |
| | Available Liquidity | 280,000,000.00 EUR | | | | | |
| | Queued Debit Cash Transfer Orders | -20,000,000.00 BUR | | | | | |
| | Queued Credit Cash Transfer Orders | 10.000.000 DJ R | | | | | |
| | Earmarked Debit Cash Transfer Orders | -20.000.000.00 BUR | | | | | |
| | Earmanked Credit Cash Transfer Order | 15 30.000.000.00 EUR | | | | | |
| | Projected Liquidity | 280,000,000.00 EUR | | | | | |
| | CB Account | | | | | | |
| | Current Balance | 200,000,000.00 EUR | | | | | |
| | Queued Debit Cash Transfer Orders | -20,000,000.00 BUR | | | | | |
| | Queued Credit Cash Transfer Orders | 10.000,000.00 BUR | | | | | |
| | Earmarked Debit Cash Transfer Orders | s -20,000,000.00 EUR | | | | | |
| | Earmarked Credit Cash Transfer Order | 15 30.000.000.00 BUR | | | | | |
| | Projected Liquidity | 200,000,000,00 EUR | | | | | |

"Current liquidity overall" consists of 'Available Liquidity Overall' reduced by the sum of 'Credit Line' of the given default MCAs

How to monitor liquidity in A2A?

> The following messages are used to monitor liquidity in A2A

| Message type | Use case | Sent by |
|--------------------------|---|-----------------|
| comt 002 CotAccount | Available liquidity CLM query: used to request CLM cash account | |
| Came.003 Geraccount | balances and credit line information | Business sender |
| compt 004 Deturn Account | Query response for available liquidity CLM query: used to | |
| | provide the requested balance information | CLM |

> Detailed information is available in the CLM UDFS Section 12. List of messages



How to monitor liquidity in A2A?

> The following messages are used to monitor liquidity in A2A

| Message type | Use case | Sent by |
|--------------------------|---|-----------------|
| comt 002 CotAccount | Available liquidity CLM query: used to request CLM cash account | |
| Came.003 Geraccount | balances and credit line information | Business sender |
| compt 004 Deturn Account | Query response for available liquidity CLM query: used to | |
| | provide the requested balance information | CLM |

> Detailed information is available in the CLM UDFS Section 12. List of messages



5. Liquidity Monitoring5.2 Statement of account

- The "statement of accounts" is created during the End-of-day period (18:00 18:45 CET), It is not created intraday.
- The report provides information on a single cash account and it contains information about all items that are posted on a cash account and balance information of the current business day
- The report is provided in the form of an ISO 20022 message: camt.053 – BanktoCustomerStatement
- To receive a statement of account report (for CLM or for RTGS accounts) the participant must configure this report in CRDM. This configuration is different from message subscription (i.e. you do not subscribe to a camt.053)
- For U2A only participants the statement of account will be displayed as a camt.053 XML message on the screen. The participant can initiate the download of the camt.053 XML string in a PDF format. The "Statement of Account" is available for download
 during 10 business days.

5. Liquidity Monitoring5.2 Account Monitoring Group

Account Monitoring Group (example 1)





5. Liquidity Monitoring5.3 Account Monitoring Group

Account Monitoring Group (example 2)



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5. Liquidity Monitoring5.3 Account Monitoring Group

How to set-up AMG in U2A?

- CRDM GUI path: T2 >> Cash >> Account Monitoring Group >> New
- Privileges: Create Account Monitoring Group
- Screen: Account Monitoring Group new/edit

| 2 🕢 🖌 T2 🔪 Cash 🔪 Account Monit | pring Group Y + New | | 5 | |
|---------------------------------|---------------------|-------------------|------------|-----|
| | | | | |
| Group Name: | | | | |
| Leader Parent BIC: | NCBXITRR001 | Leader Party BIC: | Choose BIC | |
| | | | | |
| Cash Account number: | Choose | | | |
| Valid From: | yyyy-mm-dd 🗰 C | Valid To: | yyyy-mm-dd | ₩ 0 |
| Cach Account Number | | | × | + |
| | | | | = |
| | No | Rows To Show | | |
| | | | | |
| Total rows: 0 | | | Ø | Ū |



Any questions ?

Documentation : https://www.ecb.europa.eu/paym/target/consolidation/profuse/html/index.en.html

CLM UDFS: Mainly chapter 5.4 Liquidity Management

CLM User handbook

