



‘Target Consolidation’ project Information session

Impact on the banks that are not Target2 Direct participants

12th-13th-14th of November 2019

Banque Centrale du Luxembourg

The contents of this presentation reflect BCL’s understanding of the Eurosystem technical documentation (the key ones being the CLM and RTGS User Detailed Functional Specifications). Its purpose is to propose the readers a path through this technical documentation, but should not be regarded as a sufficient material to prepare the implementation of Target Consolidation.

AGENDA

AGENDA

08h30 - 09h00 : Registration & coffee

09h00 - 09h15 : Introduction to Target Consolidation

09h15 - 10h30 : Presentation of the new T2 (CLM, RTGS and the Common Components)

10h30 - 11h00 : Coffee Break

11h00 - 12h00 : The Co-management in CLM

12h00 - 13h00 : Project milestones and the readiness framework imposed by ECB

13h00 - 14h00 : Lunch

14h00 - 15h30 : Connectivity aspects - in the presence of SWIFT and SIA COLT

15h30 - 16h00 : End of the Infosession.

AGENDA

- | | | |
|--|---|------------------------------------|
| 1. Introduction |] | <i>Pierre Thissen, Yves Wagner</i> |
| 2. The new T2 - overview |] | <i>Michael Schoenmakers</i> |
| 3. The new T2 - CLM (Central Liquidity Management) |] | |
| 4. The new T2 - RTGS (Real Time Gross Settlement) | | |
| 5. The new T2 - the common components | | |
| 6. The co-management in CLM |] | <i>Alexandre Briand</i> |
| 7. Readiness, timeline, testing and migration |] | <i>SWIFT & SIA-COLT</i> |
| 8. The Network Service Providers | | |

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1. Introduction
2. The new T2 - overview
3. The new T2 - CLM (Central Liquidity Management)
4. The new T2 - RTGS (Real Time Gross Settlement)
5. The new T2 - the common components
6. The co-management in CLM
7. Readiness, timeline, testing and migration
8. The Network Service Providers

1. Introduction

VISION 2020

Target Consolidation is part of the wider [Vision 2020](#) initiative whereby the Eurosystem initiated three distinct projects pursuing specific objectives:

TIPS (Target Instant Payments Settlement)	TARGET Consolidation	ECMS (Eurosystem Collateral Management System)
<ul style="list-style-type: none">• November 2018• New service giving commercial banks the means to offer instant payments to their clients across the Eurozone markets• Optional participation	<ul style="list-style-type: none">• November 2021• Replacement of the 'Target2' platform• Mandatory for all banking institutions	<ul style="list-style-type: none">• November 2022• New collateral management system for the Eurosystem credit activities• Mandatory for institutions posting collateral with the Eurosystem
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1. Introduction

What is TARGET consolidation?

The Eurosystem has launched a project to consolidate TARGET2 and T2S, in terms of both technical and functional aspects.

Objective: to replace the existing TARGET2 infrastructure with a new real-time gross settlement (RTGS) system complemented by a new Central Liquidity Management (CLM) system that optimises liquidity management across all TARGET Services.

November 2021: Launch of the new consolidated platform.



<https://www.ecb.europa.eu/paym/target/consolidation/html/index.en.html>

1. Introduction

Who is impacted by TARGET consolidation?

All banks will be impacted

- The current Target2 participants...
- ... but also any other banking institution holding a current account with the BCL
- The impacts, however, differ depending on the nature of the institution

Not limited to Luxembourg

- Target Consolidation is a pan-European harmonization project. It will standardize the central banks operations across ESCB countries

1. Introduction

BCL infosessions



The BCL organizes several infosession to support its large national community (130 banks):

- 19th of September 2019 – 1st infosession with the Target2 User Group (future CLM & RTGS participants) – Call for interest for co-managers (detailed in the co-management part)
- 12th of October 2019 – 2nd infosession with future CLM A2A participants*
- 13th of October 2019 – 3rd infosession with future CLM U2A participants*
- 14th of October 2019 – 4th infosession with future CLM co-managed participants*

**As per BCL's May 2019 survey about defining a potential configuration to access the future TARGET Services.*

We will stay in touch for all the project milestones, including testing, training and migration until November 2021.

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2. **The new T2 - overview**
3. The new T2 - CLM (Central Liquidity Management)
4. The new T2 - RTGS (Real Time Gross Settlement)
5. The new T2 - the common components
6. The co-management in CLM
7. Readiness, timeline, testing and migration
8. The Network Service Providers

2. The new T2 - OVERVIEW

2.1 What changes for Target2 Direct participants?

Most of the **existing business functions** will be **continued** but will be supported by a new infrastructure, requiring significant adaptations to the existing operating models

The **legal context** of the future T2 will rely on the **existing legal framework** (with reformatting of the underlying support documentation)



- | | |
|--|---|
| ➤ Access to Target2 via SWIFT | ➤ Access to T2 via SWIFT or SIA COLT |
| ➤ ISO15022 | ➤ ISO20022 |
| ➤ 1 core system (SSP) | ➤ 2 core systems (CLM, RTGS) + common components |
| ➤ 1 Target2 account | ➤ 2 T2 accounts : CLM Main Cash Account (MCA) & RTGS Dedicated Cash Account (DCA) |
| ➤ 1 GUI (ICM) | ➤ Multiple Graphical User Interfaces |
| ➤ Central Bank Operations (<i>e.g. minimum reserves, standing facilities</i>) in Target2 and/or in local central banks systems | ➤ Central Bank Operations in CLM |

2. The new T2 - OVERVIEW

2.2 What changes for NON & INDIRECT Target2 participants?

The currently 'Non Target2' banks **will start using a subset of the functionalities of the new T2.**

They will become 'T2 CLM participants' and shall **adhere to the new T2 legal framework.**

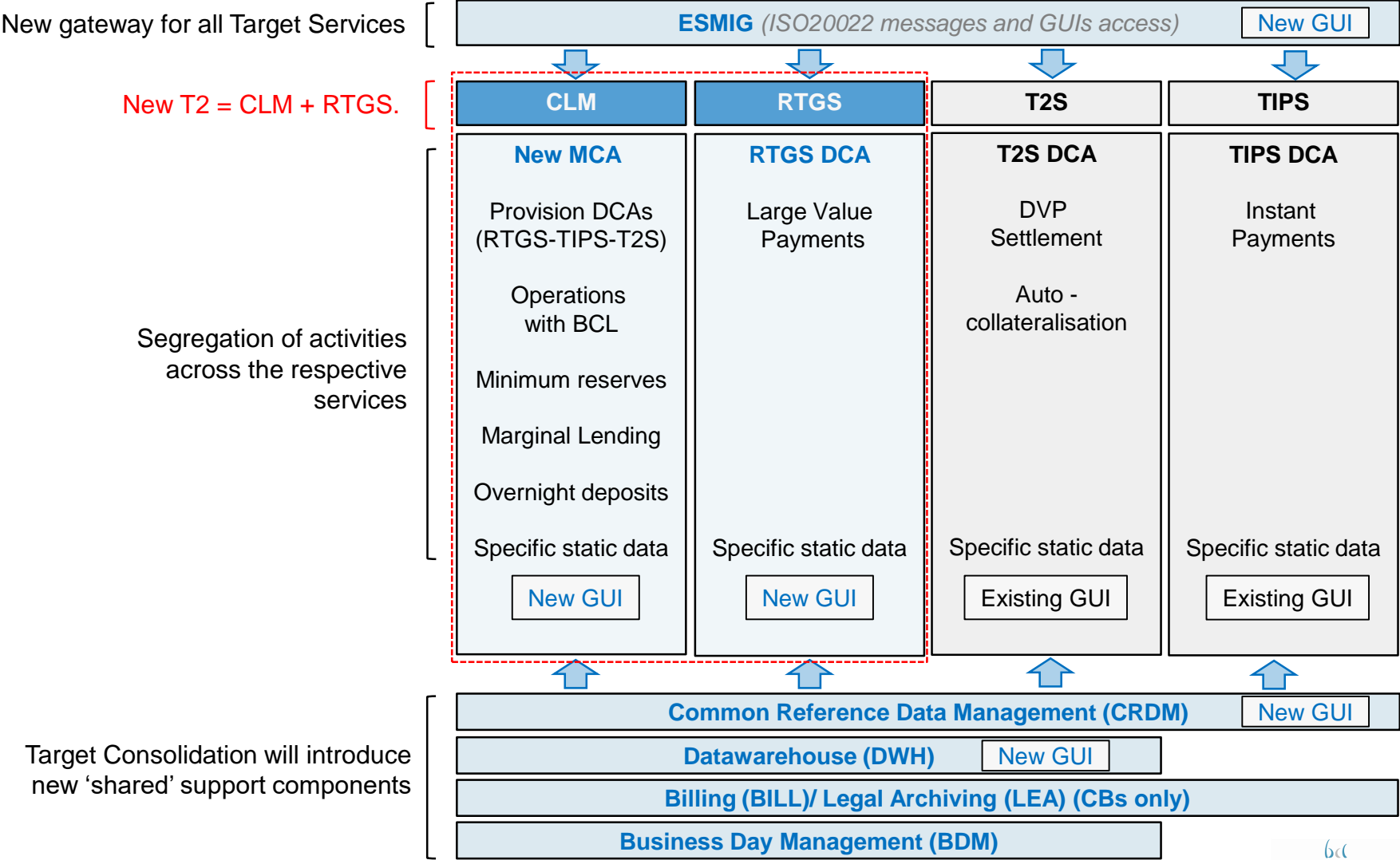


- | | |
|---|---|
| ➤ Access to Target2 via SWIFT | ➤ Access to T2 via SWIFT or SIA COLT
...or via a co-manager |
| ➤ ISO15022 | ➤ ISO20022 |
| ➤ 1 core system (SSP) | ➤ ^{1 new}
2 core systems (CLM, RTGS) + common components |
| ➤ 1 Target2 account * | ➤ ^{1 new}
2 T2 accounts : CLM Main Cash Account &
RTGS Dedicated Cash Account |
| ➤ 1 GUI (ICM) | ➤ Multiple Graphical User Interfaces |
| ➤ Central Bank Operations (e.g. <i>minimum reserves, standing facilities</i>) in Target2 and/or in local central banks systems | ➤ Central Bank Operations in CLM |

In Red: differences compared to the direct participants

2. The new T2 - OVERVIEW

2.3 The TARGET SERVICES at a glance



2. The new T2 - OVERVIEW

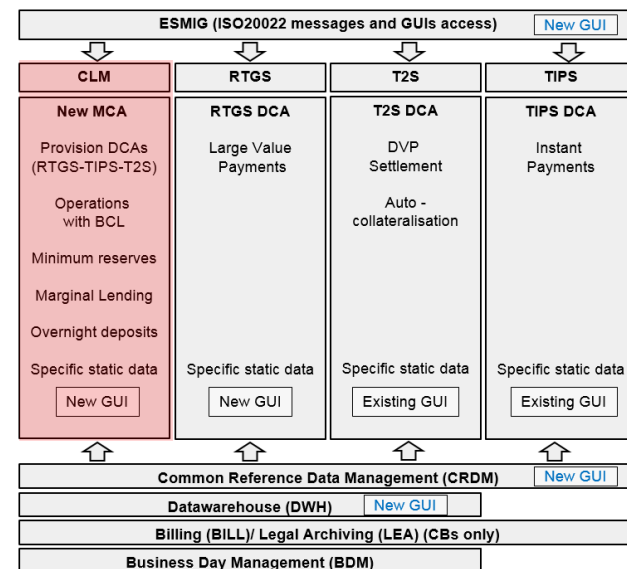
2.4 The new T2 components specialisation

Target Consolidation categorizes the participants activities and assigns them to an ad-hoc system or component:

✓ Manage Liquidity	CLM] CORE SYSTEMS
✓ Central Banks Operations (CBO)		
✓ Settle Target payments	RTGS	
✓ Exchange instructions	ESMIG] COMMON COMPONENTS
✓ Open a GUI		
✓ Manage static data and users	CRDM	
✓ Access historic data	DWH & LEA	
✓ Invoice Target Services	BILL	
✓ Run business day	BDM	

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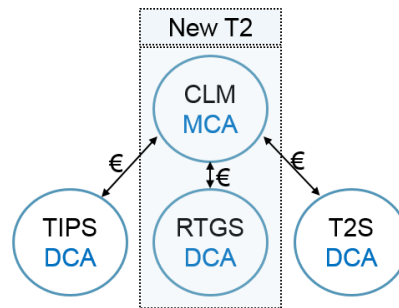


3. The new T2 - CLM

3.1 New account structure - principles

All banks will hold a **Main Cash Account** (MCA) on CLM to support their '*central bank operations*'.

The MCA is also used to fund the other types of Target accounts (*i.e. liquidity management*).



Banks eligible to monetary policy operations will also access a **Marginal Lending Account** (MLA) and an **Overnight Deposit Account** (ODA) on CLM (*opened by the Central Bank in the name of the participant*)

The current Target2 direct participants will additionally hold a **Dedicated Cash Account** (DCA) on the new RTGS

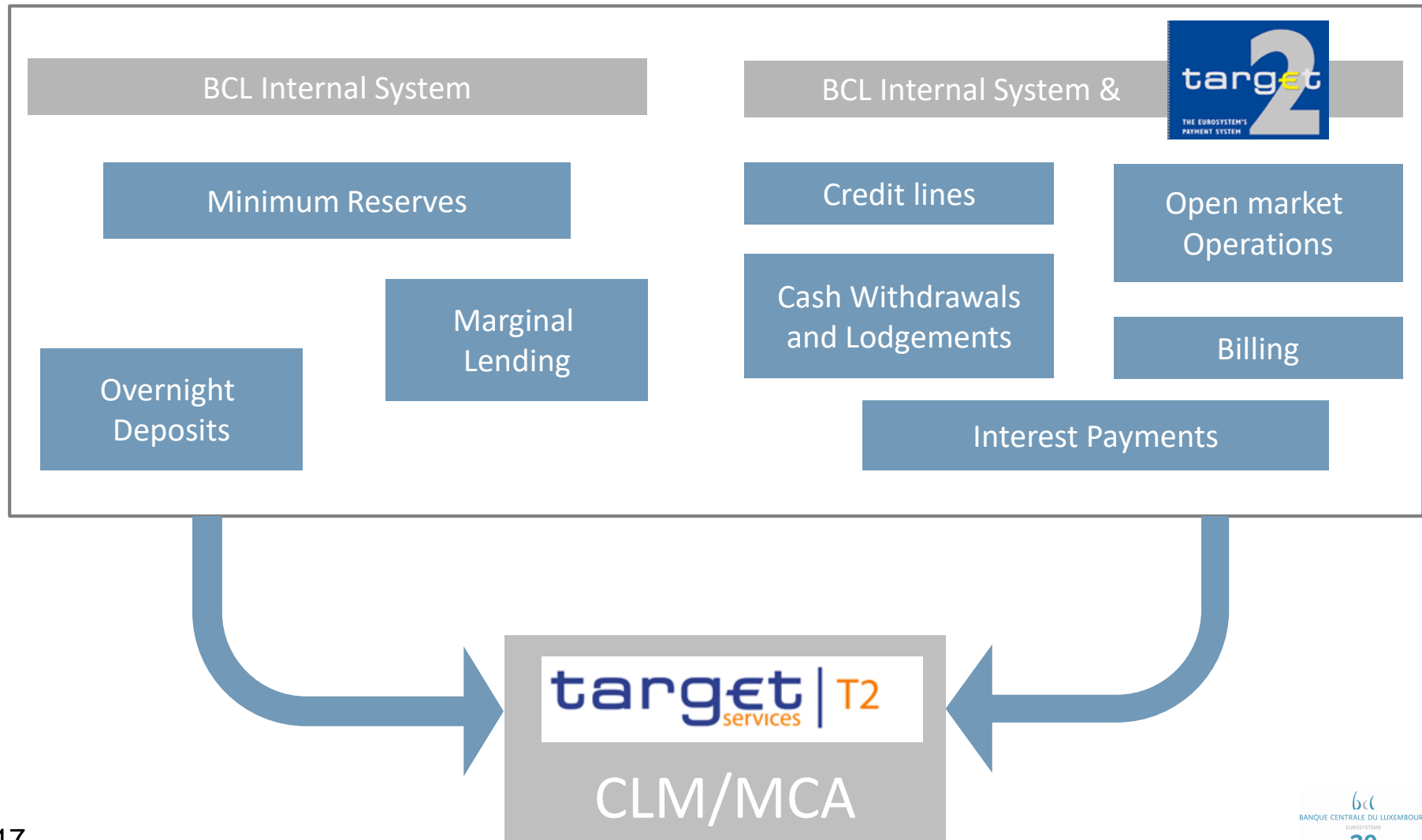
3. The new T2 - CLM

3.1 New account structure: MCA vs. DCA

	MCA	RTGS DCA
Holder	- All Luxembourg Banking institutions	- Entities with a 'Target2 Direct Participants' status
Number	- At least one MCA is mandatory	- At least one DCA if 'Target2 Direct Participants'
Usage	<ul style="list-style-type: none"> - Central Banks Operations (CBO) - Liquidity transfers to/from DCAs - <u>No</u> payments between participants (however liquidity transfers between MCAs possible – see LT groups) 	<ul style="list-style-type: none"> - Settlement of real-time payments - Ancillary Systems activities
Credit line	- Assigned only to one MCA (even if the Party has several MCAs)	- N/A
Balances	- Goes negative in case of intraday credit	<ul style="list-style-type: none"> - Cannot be negative - Remain on the DCAs at change of day
Identification	Each account (DCA & MCA) is identified by: <ul style="list-style-type: none"> • a BIC11 (must be unique in the respective settlement service) • an account ID (must be unique across all settlement services) 	

3. The new T2 - CLM

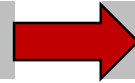
3.2 CLM and the Central Bank Operations (CBOs)



3. The new T2 - CLM

3.2.1 CBOs - Mandatory Minimum Reserves

TODAY: BCL Internal System



NOV 2021: CLM

Minimum reserve constitution

Balances transferred from current account (041) to reserve account (030):

- Automatically at EOD
- On demand before or after EOD

Interest payment

- Debit/credit on current account (041)

Query fulfillment of reserve

- Periodically made by BCL upon request

Minimum reserve constitution

No balances transfer anymore, aggregation of all End of Day balances (based on CRDM set up):

- MCA (and RTGS DCA, T2S DCA, TIPS DCA if any)

Interest payment

- Debit /credit on MCA (system triggered payment order, confirmed via camt.054)

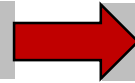
Query fulfillment of reserve

- Self monitoring in CLM (*'Minimum reserve fulfilment'* query in A2A and U2A)

3. The new T2 - CLM

3.2.2 CBOs - Overnight Deposit (OD)

TODAY: BCL Internal System



NOV 2021: CLM

OD Constitution

Upon c/p request (phone call / MT320 to BCL):

- BCL sets up deposit contract, liquidity transferred from current account (041) to a technical deposit account

OD Reimbursement

- Deposited balances return on current account (041)

Interest calculation

- Debit/credit on current account (041)

OD Constitution

Initiated by c/p directly in CLM:

- Liquidity transfer order (LTO) (camt.050)
Flow: from MCA to ODA*

OD Reimbursement

- Automatic flow: from ODA to MCA (system initiated LTO, confirmed via camt.054)

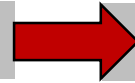
Interest calculation

- Debit/credit on MCA (system triggered payment order, confirmed via camt.054)

3. The new T2 - CLM

3.2.3 CBOs -Marginal Lending on request (MLOR)

TODAY: BCL Internal System



NOV 2021: CLM

MLOR Opening

C/p requests MLOR* to BCL (via MT202)

- BCL books ML in its systems: from current account (041) to reserve account (030) - if enough collateral

MLOR Reimbursement

- Automatic reverse transaction: from reserve account (030) to current account (041)

Interest payment

- Debit on current account (041)

*MLOR makes sense in the context of minimum reserve

MLOR Opening

C/p requests MLOR to BCL (communication channel to be confirmed)

- BCL books ML in CLM (Flow: from MLA** to MCA)

MLOR Reimbursement

- Automatic flow: from MCA to MLA** (system initiated LTO, confirmed via camt.054)

Interest payment

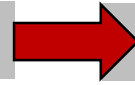
- Debit on MCA (system initiated payment order, confirmed via camt.054)

** Marginal Lending Account

3. The new T2 - CLM

3.2.4 CBOs - Automatic Marginal Lending (AML)

TODAY: BCL Internal System



NOV 2021: CLM

AML Opening

- Negative balances on current account (041)
i.e. intraday credit, are accepted overnight*
– if enough collateral

AML Reimbursement

- AML is transformed again in intraday credit
on current account (041)

Interest payment

- Debit on current account (041)

*before EOD the negative balance constitutes intraday credit

AML Opening

- If the sum of all Target accounts balances (*if party holds several Target accounts*) is negative at EOD, CLM automatically creates a payment order
(Flow: from MLA to MCA)

AML Reimbursement

- Automatic flow: from MCA to MLA** (system initiated payment order, confirmed via camt.054)

Interest payment

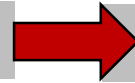
- Debit on MCA (system initiated payment order, confirmed via camt.054)

** Marginal Lending Account

3. The new T2 - CLM

3.2.5 CBOs - other CBOs

TODAY: BCL Internal System



NOV 2021: CLM

Credit line

- Provided on the current account (041)

Open Market Operations

- Initiated in BCL internal system
- Settlement of flows in current account (041)

Cash withdrawals and lodgements

- Settlement of flows current account (041)

Billing

- Debit of BCL invoices on current account (041)

Credit line

- Provided on the MCA

Open Market Operations

- Initiated in BCL internal system
- Settlement of flows in MCA

Cash withdrawals and lodgements

- Settlement of flows in MCA

Billing

- Debit of BCL invoices on MCA (pacs.010)

3. The new T2 - CLM

3.3 CLM Liquidity management functions

Liquidity management tools

1. Liquidity Transfer

2. Liquidity Transfer Group

3. Cash Rebalancing

4. Liquidity Reservation

Liquidity monitoring tools

1. Graphical User Interface

2. Alerts and Notifications

3. Reports and Queries

4. Account Monitoring Group

3. The new T2 - CLM

3.3.1 Liquidity management tools

1 - Liquidity transfer

- Two generic categories:
 - ✓ **Inter-service** (CLM <> RTGS, CLM <> T2S, CLM <> TIPS).
 - ✓ **Intra-service** (CLM<> CLM or RTGS <> RTGS, if liquidity transfer group exists)
- Four ways to generate a liquidity transfer order:
 - ✓ **Immediate Liquidity Transfer:** a participant sends a liquidity transfer order in A2A (*ISO20022 message*) or U2A (*manual booking in the CLM GUI*) mode
 - ✓ **Standing Order:** a participant can configure a recurrent order to transfer a defined amount at precise business day events
 - ✓ **Rule Based Liquidity Transfer:** a participant can define a floor amount on its MCA and set up CLM to automatically pull liquidity from a RTGS DCA if floor is breached*. Similarly, he can configure a ceiling amount that would push liquidity to a RTGS DCA**
 - ✓ **Automatic Liquidity Transfer for CBOs:** by default (*no participant intervention of any sort*), CLM automatically pulls liquidity from a RTGS DCA*** when a central bank operation is pending due to lack of liquidity on the MCA.

* & *** Only if MCA & DCA belong to the same party, hence N/A for today's audience which has no RTGS DCA.

** DCA can belong to another entity, so relevant for today's audience.

3. The new T2 - CLM

3.3.1 Liquidity management tools

2 - Liquidity Transfer Group

Participants cannot instruct CLM intra service liquidity transfers (i.e. MCA to MCA) unless the MCAs belong to the same Liquidity Transfer Group.

The configuration of a liquidity transfer group is:

- optional
- made by Central Banks upon request
- possible on a cross – border basis

3 - Cash Rebalancing

Participants can define in CRDM **floor** and **ceiling** amounts.

Two system behaviors can be defined:

- Breach notification
- Automatic inter-service liquidity transfer (*as per previous slide, 'rule based liquidity transfer'*)

3. The new T2 - CLM

3.3.1 Liquidity management tools

4 - Liquidity reservation

Participants can reserve liquidity on the MCA for central bank operations.

Reservations can be instructed:

- In A2A (*ISO20022 message*) or U2A (*manual booking*) mode
- With immediate effect, by sending a current reservation order,
- Or configured as a Standing Order Reservation (set up in CRDM), valid at start of next business day.

3. The new T2 - CLM

3.3.2 Liquidity monitoring tools

1 - Graphical User Interface (GUI)

A GUI allows participants to access the Target balances information in U2A mode:

- In **CLM GUI**: participants can see information on MCAs as well as on the DCAs linked to its Party
- The **RTGS/TIPS/T2S GUIs** show information on the participant's accounts in this service only.

2 - Alerts and Notifications

Participants can subscribe to alerts and notifications

- Either displayed on a GUI or sent in A2A mode
- Event based (e.g. floor / ceiling) or at a specific schedule (Start of Day, End of Day...)

3 - Reports and Queries

- A report is automatically generated at a pre-defined time, upon subscription by the participant. Participants can subscribe to the End of Day statement of account (camt.053)
- A query is a specific demand made by the participant in A2A mode or in the GUI.

3. The new T2 - CLM

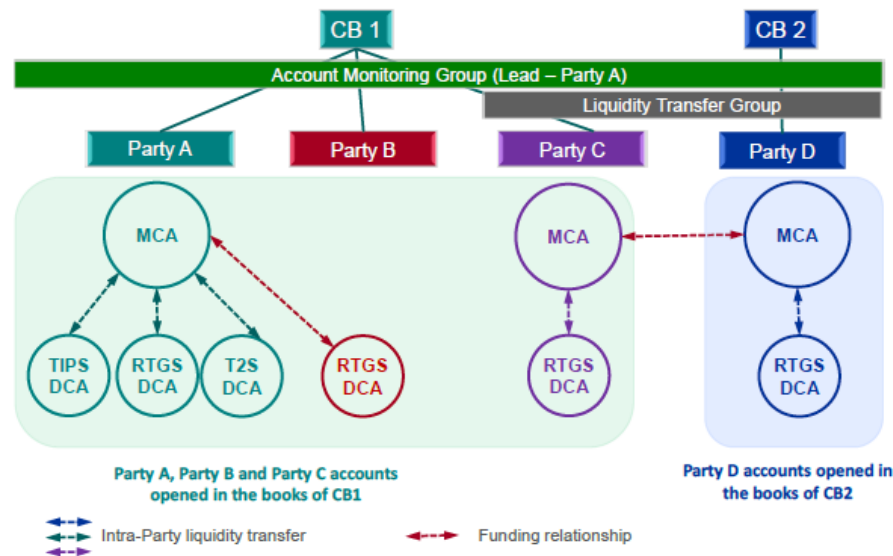
3.3.2 Liquidity monitoring tools

4 - Account Monitoring Group

Participants may configure an *Account Monitoring Group* to monitor the liquidity outstanding on a set of grouped accounts, which can be:

- its MCAs and RTGS/TIPS/T2S DCAs
- the MCAs/ DCAs of other Parties (if access rights granted)
- accounts belonging to multiple central banks

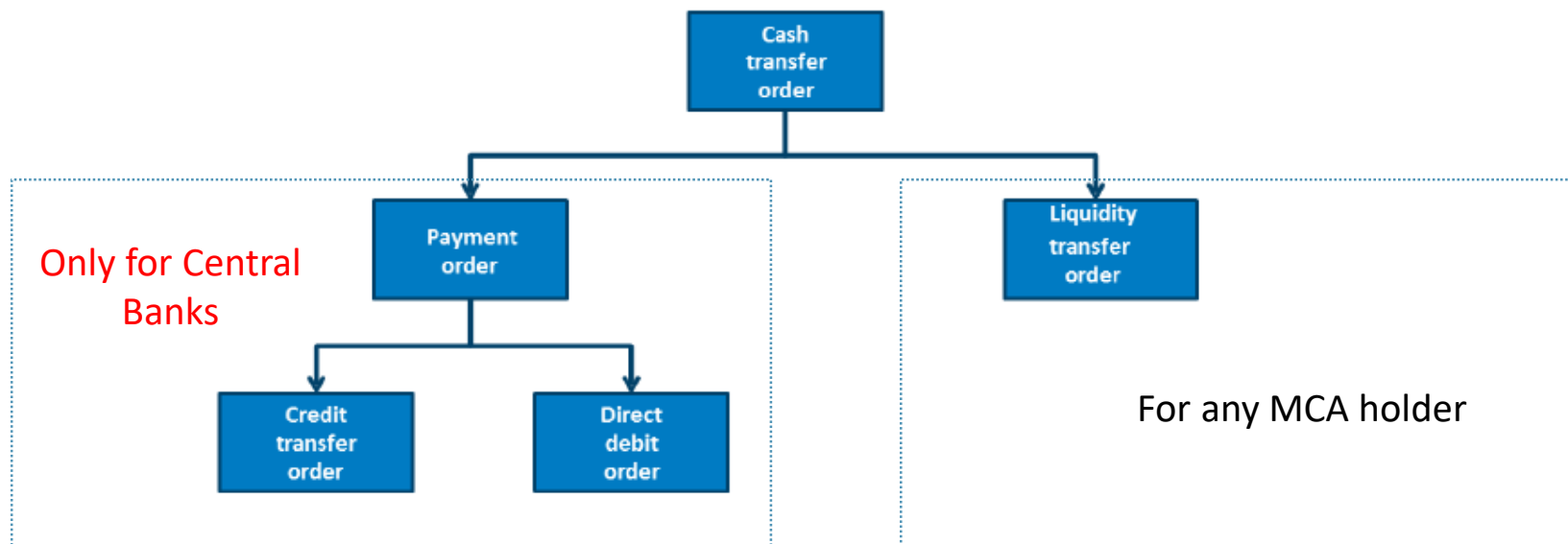
This is purely for monitoring purposes (no processing of payments or liquidity transfers)



3. The new T2 - CLM

3.4 Cash flows in CLM

CLM supports three types of cash transfers orders



Cash transfer order	Message Identifier	Message Name
Credit transfer order for an interbank payment	pacs.009	FinancialInstitutionCreditTransfer
Direct debit order for an interbank payment	pacs.010	FinancialInstitutionDirectDebit
Liquidity transfer order	camt.050	LiquidityCreditTransfer

3. The new T2 - CLM

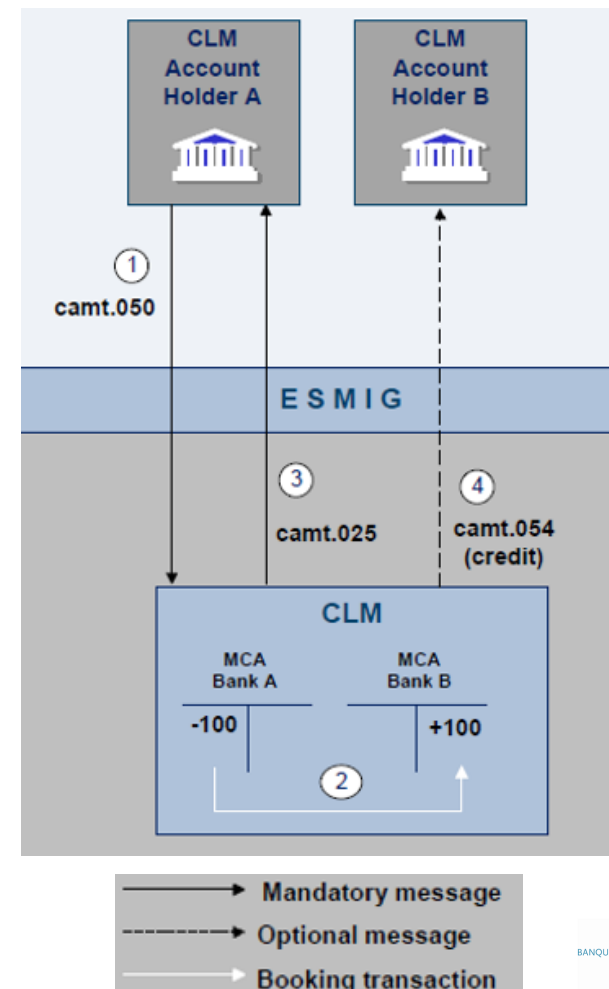
3.4.1 Participants liquidity transfer order

Participants can instruct **intra-service** liquidity transfers **between two CLM MCAs** in A2A (ISO20022 message) or U2A (manual input in CLM GUI) mode.

Preliminary condition: the two MCAs must be part of the same liquidity transfer group.

Exception: if the creditor/beneficiary of the LTO is a Central Bank account, there is no need for a liquidity transfer group.

Illustration: Liquidity transfer order initiated via camt.050



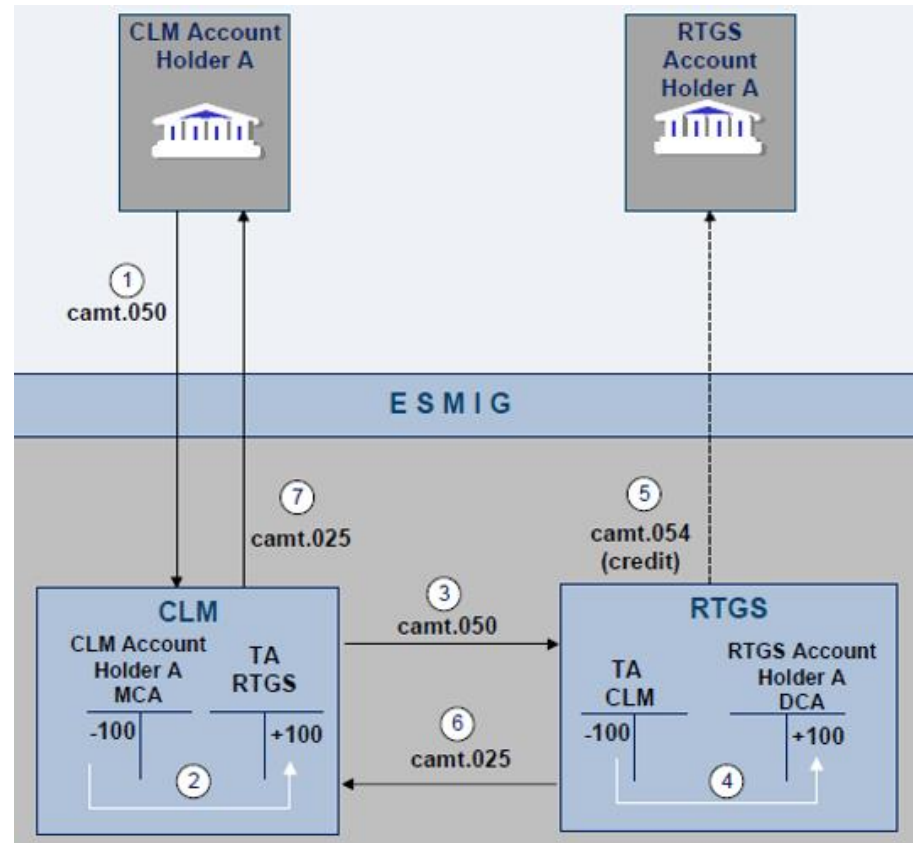
3. The new T2 - CLM

3.4.1 Participants liquidity transfer order

Participants can instruct **inter-service** liquidity transfers **between a CLM MCA and a RTGS/T2S/TIPS DCA** in A2A (ISO20022 message) or U2A (manual input in CLM GUI) mode

The two accounts do not need to be related (i.e. no need to configure a liquidity transfer group)

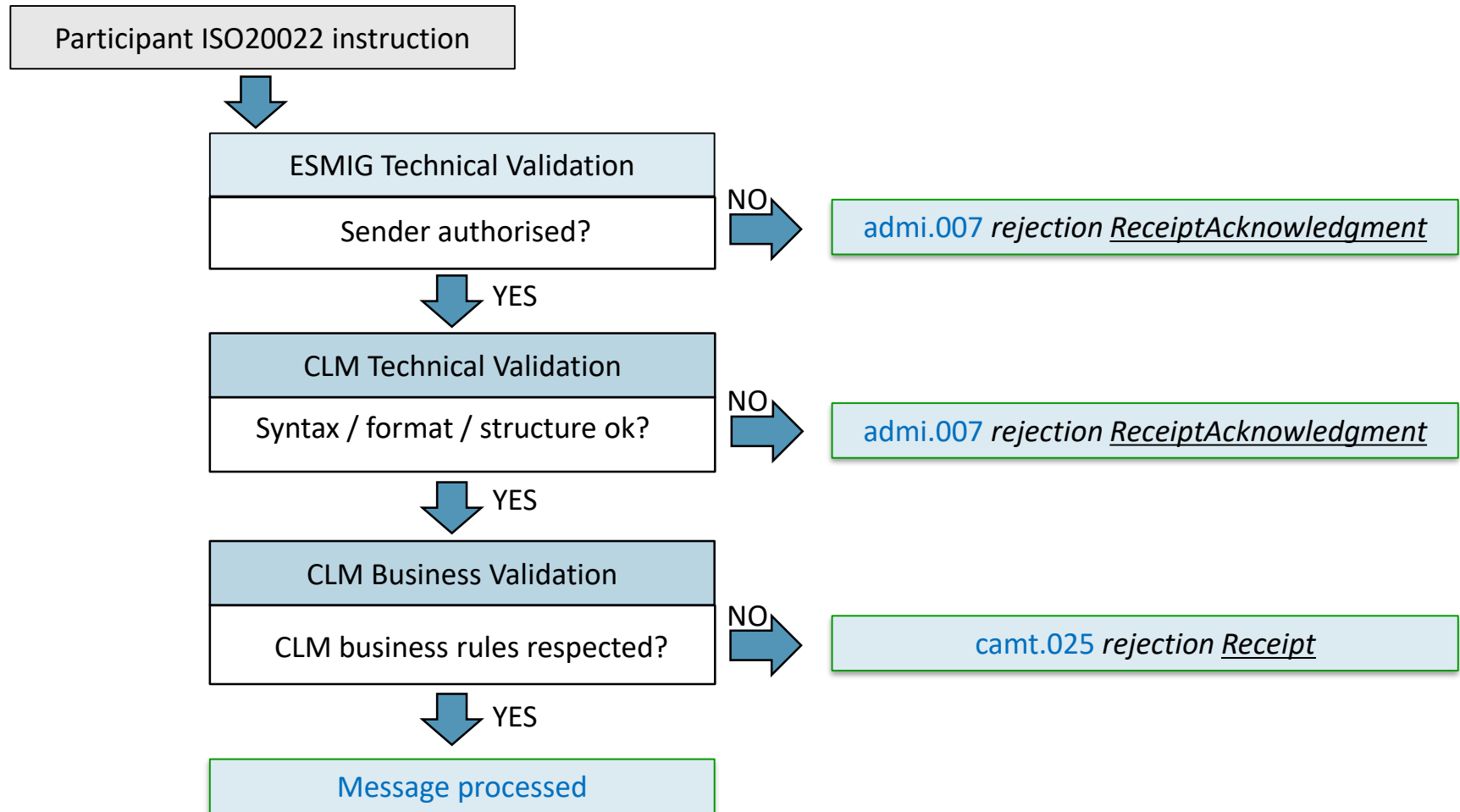
Illustration: Liquidity transfer order initiated via camt.050



3. The new T2 - CLM

3.4.1 Participants liquidity transfer order

The participants **A2A liquidity transfers** orders are **validated** applying the following logic:



e.g. order executed, order queued, ...

3. The new T2 - CLM

3.4.2 Central Bank payment orders

Central Banks can send **credit and debit transfers** orders to CLM.

! Participants do not have the possibility to use these messages !

Illustration Credit transfer order: pacs.009

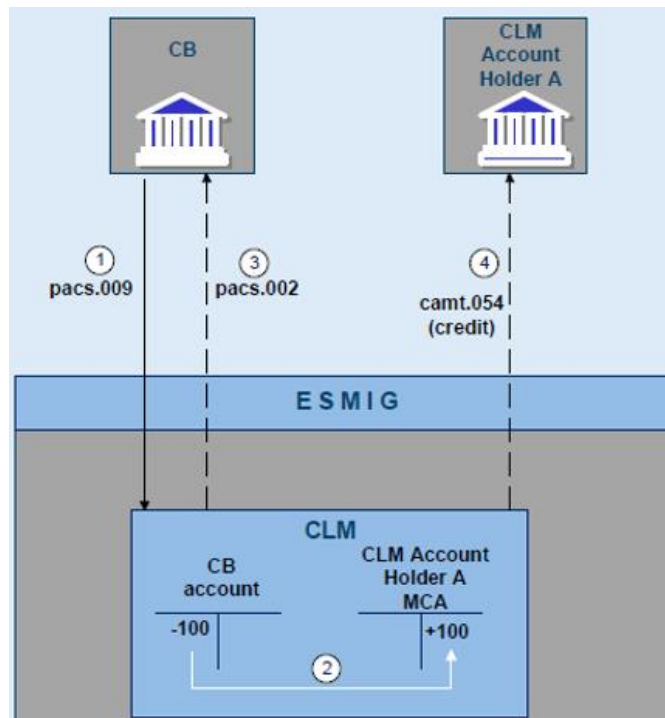
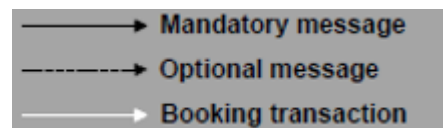
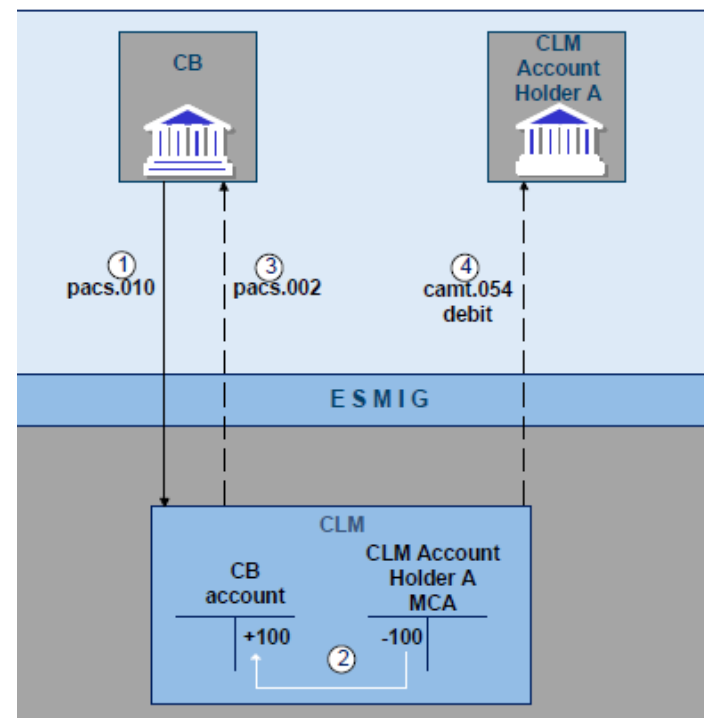


Illustration Direct debit order: pacs.010



3. The new T2 - CLM

3.4.3 System initiated transfer orders

In addition to the transfer orders booked by the participants or the central banks,

CLM also automatically triggers cash transfers orders in case of:

- Overnight Deposit reimbursement (*liquidity transfer order from ODA to MCA*)
- Marginal Lending On Request reimbursement (*liquidity transfer order from MCA to MLA*)
- Automated Marginal Lending opening (*credit transfer order from MLA to MCA*)
- Automated Marginal Lending reimbursement (*debit transfer order from MCA to MLA*)
- Interests related to Minimum Reserves, Overnight Deposits, Marginal Lending or other purposes (*debit transfer order from MCA to CB account if interests due by the participant, credit transfer order from CB account to MCA if remuneration owed to participant*)

For all of the above, the participant does not receive any copy of the cash transfer order, but [may subscribe to camt.054 messages](#) (debit/credit notification)

3. The new T2 - CLM

3.5 GUI illustration - browse minimum reserves

target

services

T2 Central Liquidity Management

PRODUCTION | Business Day 2019-06-26

User:
Release:
Last Update:

RMPC-GUI-USR01
1.010.000
2019-06-26 09:34:34

placeholder logo

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✉

Display Minimum Reserve (for direct and intermediary)

Monetary Policy Operations / Reserve Management / Display Minimum Reserve (for direct and intermediary)

Work as:
Work on behalf:

ZYZDEFFCB1
ZYZDEFFPT1

? ⚙ ⏻

Party Information

Party BIC

ZYZDEFFPT1

Minimum Reserve

Current Maintenance Period From	Current Maintenance Period To	Minimum Reserve	Total Minimum Reserve
2019-07-01	2019-08-12	5,000,000.00 EUR	6,000,000.00 EUR

Display Minimum Reserve for Indirects

Fulfillment of Minimum Reserve

Running Average

4,500,000.00 EUR

Adjustment Balance

6,500,000.00 EUR

Source of Balance for Minimum Reserve	Account Number	EoD Balance	Related Business Day of EoD Balance	Current Balance
MCA	MCA Number 1231	4,000,000.00 EUR	2019-07-16	4,000,000.00 EUR
RTGS DCA	DCA Number 123	1,500,000.00 EUR	2019-07-16	1,500,000.00 EUR
		Total EoD Balance		Total Current Balance
		5,500,000.00 EUR		5,500,000.00 EUR

3. The new T2 - CLM

3.5 GUI illustration - browse standing facilities

target

T2 Central Liquidity Management

PRODUCTION | Business Day 2019-06-26

User:
Release:
Last Update:

RMPC-GUI-USR01
1.010.000
2019-06-26 09:28:40

placeholder logo

Display Standing Facilities

Monetary Policy Operations / Display Standing Facilities

Work as:
Work on behalf:

ZYXZDEFFCB1
ZYXZDEFFPT1

?

⚙

⏻

+ Search Criteria

- Account Information

Party BICZYXZDEFFPT1Account NumberMCA Account 1

Display Cash Transfers

- Marginal Lending Account

Account Number	Account Type	Current Balance
MARGLENDABC123	Marginal Lending Account	0.00 EUR
ZYXZDEFFPT1	MCA	250,000.00 EUR

New Liquidity Transfer from Marginal Lending Account

New Liquidity Transfer to Marginal Lending Account

- Overnight Deposit Account

Account Number	Account Type	Current Balance
OVERNIGHTDEPABC123	Overnight Deposit Account	0.00 EUR
ZYXZDEFFPT1	MCA	250,000.00 EUR

Note: availability of this screen to CLM participants needs to be confirmed

Non binding illustration, final GUI details may slightly differ

3. The new T2 - CLM

3.5 GUI illustration - browse tasks queue

target | T2 Central Liquidity Management
services PRODUCTION | Business Day 2019-06-26

User:
Release:
Last Update:
RMPC-GUI-USR01
1.010.000
2019-06-26 10:03:02

placeholder logo

☰

✉

List of Task Queue
Administration / List of Task Queue

Work as:
Work on behalf:
ZYXZDEFFCB1
ZYXZDEFFPT1

?

⚙

⏻

+ Search Criteria

- List of Task Queue

Task ID	Kind of Task	Amount	Status	Entry Timestamp	User
<input checked="" type="checkbox"/> 123	DUMMY TASK 1	5.000,00 EUR	To Confirm	2019-03-15 11:11:11	User1
<input type="checkbox"/> 234	DUMMY TASK 2	2.000.000,00 EUR	To Confirm	2019-03-15 11:11:12	User1
<input type="checkbox"/> 345	DUMMY TASK 3	3.000.000,00 EUR	Rejected	2019-03-15 11:11:13	User1

◀

1

▶

⌂

Non binding illustration, final GUI details may slightly differ

3. The new T2 - CLM

3.5 GUI illustration - browse details of a task queue

target services

T2 Central Liquidity Management
PRODUCTION | Business Day 2019-06-26

User:
Release:
Last Update:RMPC-GUI-USR01
1.010.000
2019-06-26 10:16:31

placeholder logo

Details of Task Queue
Administration / Details of Task Queue

Work as:
Work on behalf:ZYXZDEFFCB1
ZYXZDEFFPT1

?⚙️🔌

Task Details - DUMMY TASK 1

StatusTo Confirm

Error Code

Overview of Changes

Attribute	Old Value	New Value
Earliest Debit Time	10:30:00	11:30:00

Overview Task

Corresponding Cash Transfer

Queue Position	Instruction ID	Message Type	Amount	Cash Transfer Status	Earliest Debit Time	Latest Debit Time	Entry Time
	ABCD1000	camt.050	5,000.00 EUR	Earmarked	10:30:00		09:00:00

Account Information

Debit Account

Party BIC	Account Number	Responsible CB
CRDITBIC123	CRDITBIC123	DE

Credit Account

Party BIC	Account Number	Responsible CB
ZYXZDEFFPT1	ZYXZDEFFPT1	DE

Sender and Receiver Information (BAH)

Sender BIC	Receiver BIC
------------	--------------

ConfirmRejectEdit

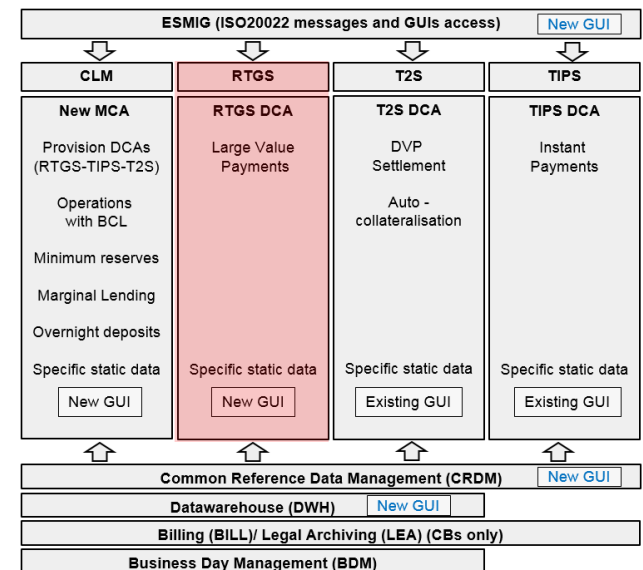
XML Message

XML Message

<?xml version="1.0" encoding="UTF-8"?>
<AppHdr xmlns="urn:iso:std:iso:20022:tech:sd:head:001.001.01" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:iso:std:iso:20022:tech:sd:head:001.001.01">
<Fr>
<FIld>
<FinInstnId>
<BICFI>NCBPARTYBIC</BICFI>
</FinInstnId>
</FIld>
</Fr>
<To>
<FIld>
<FinInstnId>

AGENDA

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2. The new T2 - overview
3. The new T2 - CLM (Central Liquidity Management)
4. The new T2 - RTGS (Real Time Gross Settlement)
5. The new T2 - the common components
6. The co-management in CLM
7. Readiness, timeline, testing and migration
8. The Network Service Providers



4. The new T2 – RTGS (Real Time Gross Settlement)

4.1 TARGET2 **today**

- ✓ TARGET2 launched in **November 2007** (predecessor was TARGET).
- ✓ TARGET2: **Real-Time Gross Settlement System (RTGS)** owned and operated by the Eurosystem.
- ✓ Payment orders processed via **single shared platform (SSP)**, settled with immediate finality.
- ✓ Connection in application-to application (**A2A mode**) (*e.g. via back office system*) **or** user-to-application (**U2A**) mode (*monitoring via the ICM graphical user interface GUI*).
- ✓ Payment orders in EUR by central banks and commercial banks. Settled in central bank money (accounts held with a central bank). Payment processing involves: **the Payment Module (PM), Information & Control Module (ICM) and Enhanced Contingency Solution (ECONS)**.
- ✓ **One system used for several purposes**: Interbank and commercial transactions between market participants, monetary policy operations. Central bank operations. Settlement operations of ancillary systems.

4. The new T2 – RTGS (Real Time Gross Settlement)

4.2 TARGET2 today vs. T2-RTGS Component tomorrow



Participation

Direct participant
Indirect participant
Multi-addressee access
Addressable BIC

Direct participant
Indirect participant
Multi-addressee access
Addressable BIC

Access

-Application letter/test procedure/registration forms with CB
-SWIFT e-ordering process to register
-U2A or A2A mode; U2A mode: monitoring in ICM but entering payments only in contingency situation *

-Application letter/test procedure/registration forms with CB
-e-ordering via NSP (SWIFT [or SIA-Colt](#))
-U2A or A2A mode; U2A mode: monitoring [and entering](#) payments in RTGS-GUI will be possible.

Business day / settlement period RTGS

**high level overview, not considering start-of-day procedure /AS night time settlement / maintenance window*

07:00h – 18:00h day trade phase (payment processing). No modification window.
Cut-off interbank payments 18:00h
Cut-off customer payments 17:00h
Target2 calendar includes certain holidays
Warehoused payment up to 5 bd in advance.

New Modification window 02:30h-03:00h.
Settlement window starts at 03:00h, still closes at 18:00h
Cut-off interbank payments remains 18:00h
Cut-off customer payments remains 17:00h
RTGS will follow same holiday schedule as today
Warehoused payments up to 10 bd in advance.

Payments

One PM (TARGET2) account for
- liquidity management
- payments (interbank, customer, direct debit)
- central bank operations
T2S accounts linked to PM account(s)

Higher separation/segregation of activities:
CLM - MCA for liquidity management and central bank operations
RTGS-DCA(s) for payments
DCA(s) also available in other Target services

* In some markets, internet based participants do not face this limitation.

However, internet based participation is not deployed in Luxembourg and will no longer exist with T2 RTGS

4. The new T2 – RTGS (Real Time Gross Settlement)

4.2 TARGET2 today vs. T2-RTGS Component tomorrow



Liquidity transfers

- Immediate (example: Target2 to T2S)
- Standing order (fixed amount for liquidity transfer Target2 to T2S during night time settlement)

- Immediate
- Standing order
- **Rule based** (specific condition set-up for queued urgent payment orders, AS transfer, floor/ceiling to push/pull liquidity to/from the RTGS DCA: RTGS DCA is linked to the CLM-MCA).

Relevant message types

- FIN MT 202
- FIN MT 103
- FIN MT 204

ISO 15022.

- **pacs. 009 (FinancialInstitutionCreditTransfer)**
- **pacs. 008 (CustomerCreditTransfer)**
- **pacs. 010 (FinancialInstitutionDirectDebit)**

ISO 20022.

Participation and orders direct /indirect participant

**excl. addressable BIC,
multi-addressee access
and ancillary system in this view*

- Direct participant: MT 202, MT 103, MT 204
- Indirect participant: MT 202, MT 103, MT 204 *via the direct participant*
- Central bank all above MT “act on behalf” of a direct participant (contingency situation).

- Direct participant: **pacs.009, pacs.008, pacs.010**
- Indirect participant: **pacs.009, pacs.008, pacs.010** *via the direct participant*
- Central bank all above **pacs.** “act on behalf” of a direct participant (contingency situation).

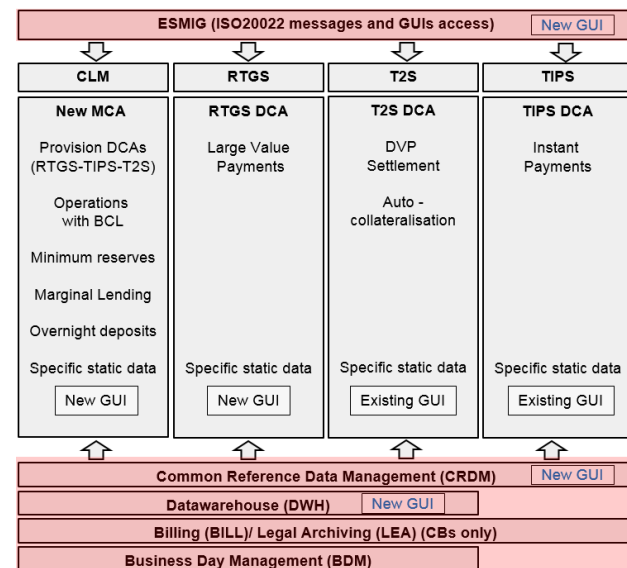
Payment queue management / modifications

In general: FiFo principle.
Payments can be classified as normal/urgent/
highly urgent.
Possibility to modify priority class for unsettled
payments.
Possibility to set execution time/modify for
unsettled payments.

In general: FiFo principle.
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5. The new T2 – COMMON COMPONENTS

5.1 CRDM – principles

The 'Common Reference Data Management' component is used to **configure, maintain and query a series of static data**.

CRDM supports data made available to several Target Services (T2,T2S, TIPS), **preventing redundant implementation of data management functionality** in multiple services.

CRDM automatically propagates to each Target Service the data relevant for its specific needs.

CRDM can be operated in both:

- A2A mode, by sending/receiving ISO20022 messages,
- U2A mode, by using a specific CRDM Graphical User Interface,

CRDM is a pre-requisite for all participants:

prior to taking any action in CLM, participants shall be correctly configured in CRDM.

5. The new T2 – COMMON COMPONENTS

5.1 CRDM – access rights management

The participants, and their users, accesses will be defined in CRDM in three steps:

- ✓ 1st Account holder **signs** the **T2 GUIDELINE** and send **REGISTRATION FORMS** to Central Bank

Central Bank sets up and maintain static data in the new T2 for its national community.



- ✓ 2nd **Central Bank configures Static Data:**

Party (*i.e. legal entity interacting with a Target Service*) – **BIC mandatory**

Accounts (*unique across all Target Services*)

Administrators Users (*i.e. users acting as administrator within each participant*)



- ✓ 3rd **Bank Administrators configures Static Data**

Certificates (*delivered by the NSP*)

Users

Link users and certificates

Grants appropriate privileges to the users

5. The new T2 – COMMON COMPONENTS

5.1 CRDM – access rights management

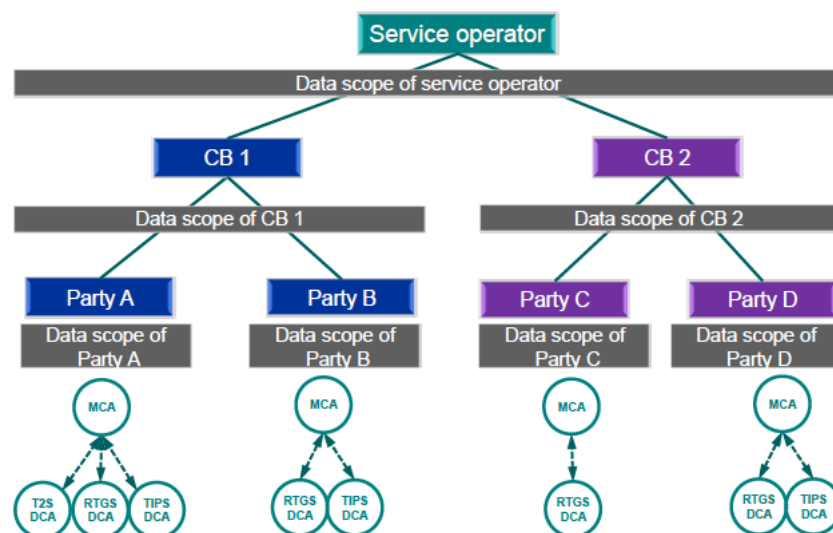
The **data scope** of an individual user results from the **hierarchical structure of T2 actors**:

1st - The T2 Service operator (4CBs) can access the widest possible data scope

2nd - A specific Central Bank's data scope is limited to its community

3rd - A Party's data scope is limited to its business under a specific Central Bank

4th - An individual user's data scope is limited to its Party's data scope



About an individual user data scope:

- ✓ Each user is assigned one or several **predefined roles** for each specific service or component.
- ✓ A role is a set of privileges that defines which business functions are assigned to a user
- ✓ Each privilege defines the type of action authorized for a business function: “read-only” or “write”.
- ✓ In A2A mode, business functions apply the two-eyes principle. In U2A, it is either two-eyes or four-eyes principle.

5. The new T2 – COMMON COMPONENTS

5.2 Datawarehouse, Billing and Legal Archiving

Datawarehouse (DWH)

- ✓ The DWH component allows participants to retrieve 'historical information'
- ✓ Transactions having reached a final state are stored in DWH where they are accessible as from next business day.

Legal Archiving (LEA)

- ✓ Stores information subject to legal archiving requirements (incoming/outgoing business transactions from/to participants)
- ✓ 10 years retention period
- ✓ Only available to Central Banks

Billing (BILL)

- ✓ Calculates fees incurred by the utilization of the Target Services
- ✓ Prepares invoices templates
- ✓ Generates payments instructions
- ✓ Only available to Central Banks but will impact participants: new invoices layout, new payment instructions (pacs.010 on MCA)

5. The new T2 – COMMON COMPONENTS

5.3 Business day management

Technical component setting the pace of the Target Services processes (CLM, RTGS, T2S).

	CLM	RTGS	CRDM/DWH
Change of business day	18:45		
Start of Day procedures	18:45-19:00	18:45-19:30	18:45-19:00
Availability for users until the maintenance window	19:00-00:30 <i>(no LTOs allowed between 19:00-19:30)</i>	19:30-00:30 <i>(only for settlement of AS transactions and LTOs)</i>	19:00-00:30
Maintenance window ²¹	00:30-02:30		
Availability for users after the maintenance window	02:30-18:00	02:30-03:00 <i>(only for maintenance of warehoused payments)</i>	02:30-18:00
		03:00-18:00 <i>(continuous processing of payment orders, AS transactions and LTOs)</i>	
Cut-off for Customer Payments	NA	17:00	NA
Cut-off for Interbank Payments / CB Operations	18:00	18:00	NA
End of Day procedures	18:00-18:45		
Cut-off for Standing Facilities	18:15 <i>(15 min after the start of End of Day procedures; + 15 min on the last business day of the reserve maintenance period)</i>	NA	NA

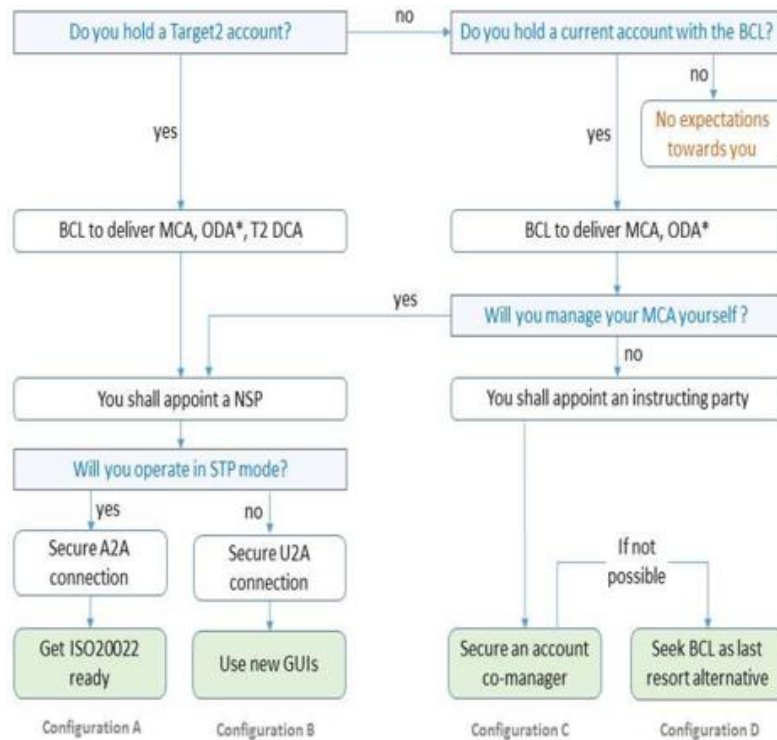
Visible impact for the participants: **revised opening hours**

BCL support hours unchanged: from 06:30a.m. to 07:00 pm

5. The new T2 – COMMON COMPONENTS

5.4 ESMIG - the Eurosystem Single Market Gateway

In its earlier communications, the BCL envisaged **four options to operate a MCA** :



- A. The MCA holder manages its account via ISO20022 messages
- B. The MCA holder manages its account manually in the CLM GUI (graphical user interface)
- C. The MCA holder delegates the management of its account to a « co-manager »
- D. The MCA holder delegates the management of its account to the BCL (**contingency option only, this cannot be the participant's standard strategy**)

Securing a **connection to ESMIG** is a **pre-requisite for configurations A & B**

It requires to contract with a Network Service Provider (NSP): **SWIFT** or **SIA COLT**

5. The new T2 – COMMON COMPONENTS

5.4 ESMIG - guidelines

- Unique access point for all Target Services (T2, TIPS but also ECMS & T2S later on)
- Connection exclusively enabled by Network Services Providers (SWIFT and SIA COLT)
- Supports both A2A & U2A* access (i.e. NSP to be appointed for both A and B configurations)
- For A2A usage, exclusively accepts ISO20022 messages (from 'Y copy' to 'V shape' model)
- Performs users authentication

Securing a connection to ESMIG is a mandatory pre-requisite to access the new T2

Any entity requiring an access to T2 shall consider the following steps:

- Contact SWIFT and/or SIA COLT
- For A2A usage, prepare ISO20022 conversion:
 - i- check T2 MyStandards,
 - ii- promote changes in your infrastructure,
 - iii- test your new messages via the MyStandards Readiness tool **

** Application To Application = STP mode vs. User to Application = usage of the Graphical User Interface*

*** https://www.ecb.europa.eu/paym/pdf/consultations/2019-07-05_MyStandards_Readiness_Portals.pdf*

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6. The co-management

6.1 What is the Co-management ? General principles

General Principles

- ✓ The co-management is an **optional** feature in CLM
- ✓ Allows to fully or partially **delegate your MCA management** to a co-manager
- ✓ A co-managee does **not** necessary need an **access** to ESMIG
- ✓ Co-Manager must be a **MCA Holder** (having access to ESMIG)
- ✓ **Cross-border set-up is possible** (i.e. the co-manager and the co-managed actors are in different countries, under different central banks)
- ✓ The **privileges/roles** (U2A & A2A) assigned to the user of the CLM Account Holder are also **applicable** for the co-managed account **without limitations** (e.g. A co-manager can query its own account balance, and the balance of the co-managed account.)
- ✓ A regular participant with an **ESMIG access** could also appoint a co-manager and become co-managed. **Both** would have **access** to **the MCA**, and the co-managed participant could delegate all or part of the accounts activities to the co-manager (no data scope restrictions are possible)

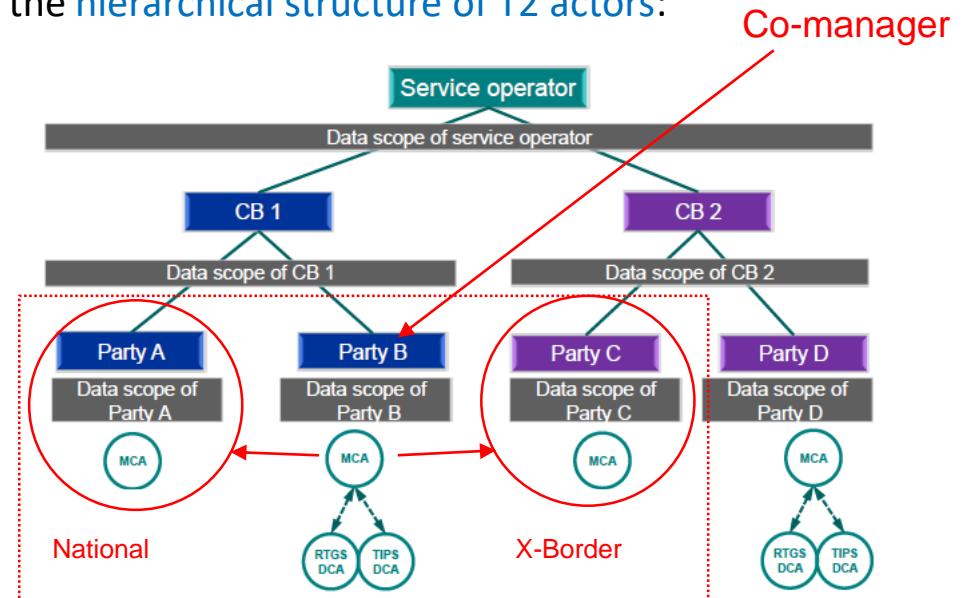


The co-management functionality will be available for all CLM account holders: any CLM account can be co-managed and any CLM account holder can become a co-manager (subject to both parties agreeing to this).

6.1 What is co-management ? Access rights

The **data scope** of an individual user results from the **hierarchical structure** of T2 actors:

- 1st - The T2 Service operator (4CBs) can access the widest possible data scope
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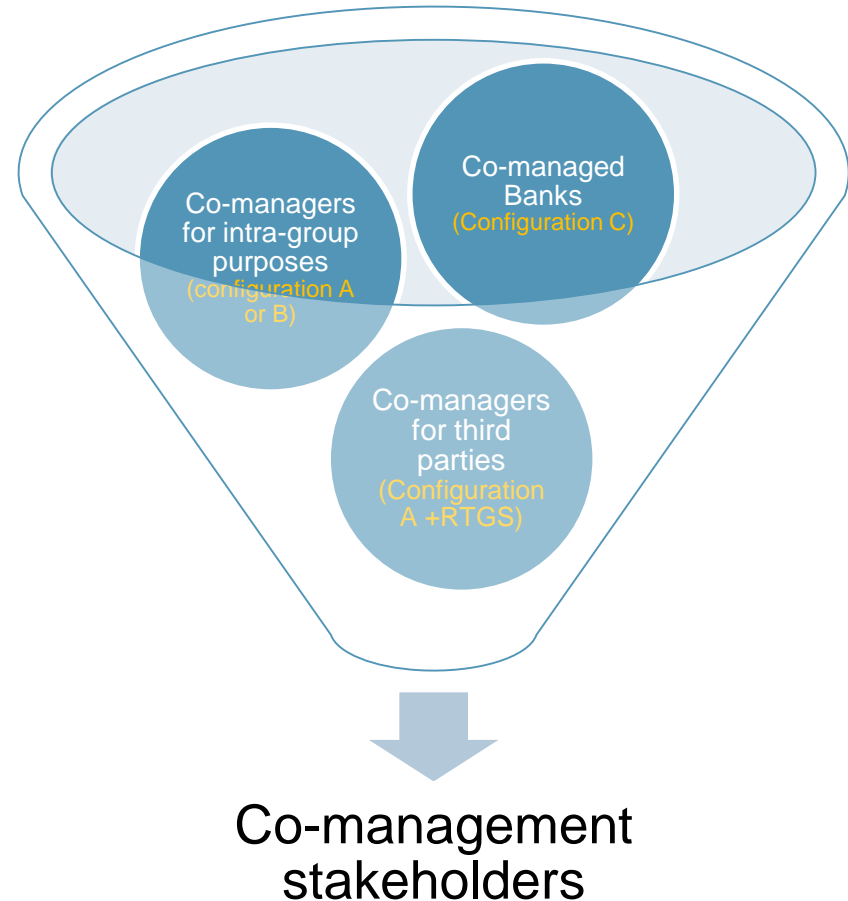
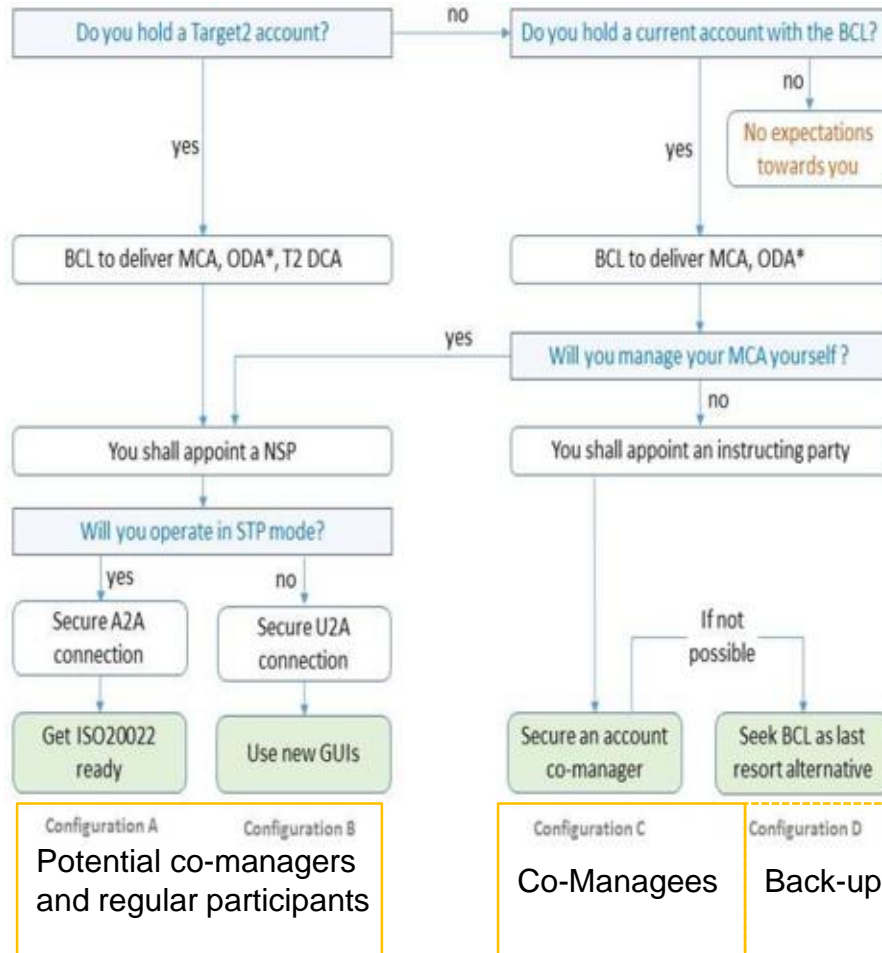


Co-management data scope

Change in the pyramidal / hierarchical concept of the data scope propagation

6. The co-management

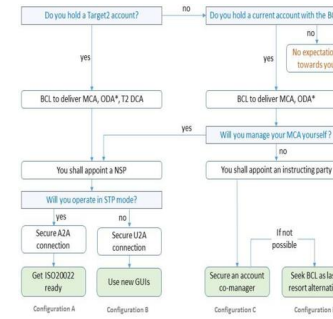
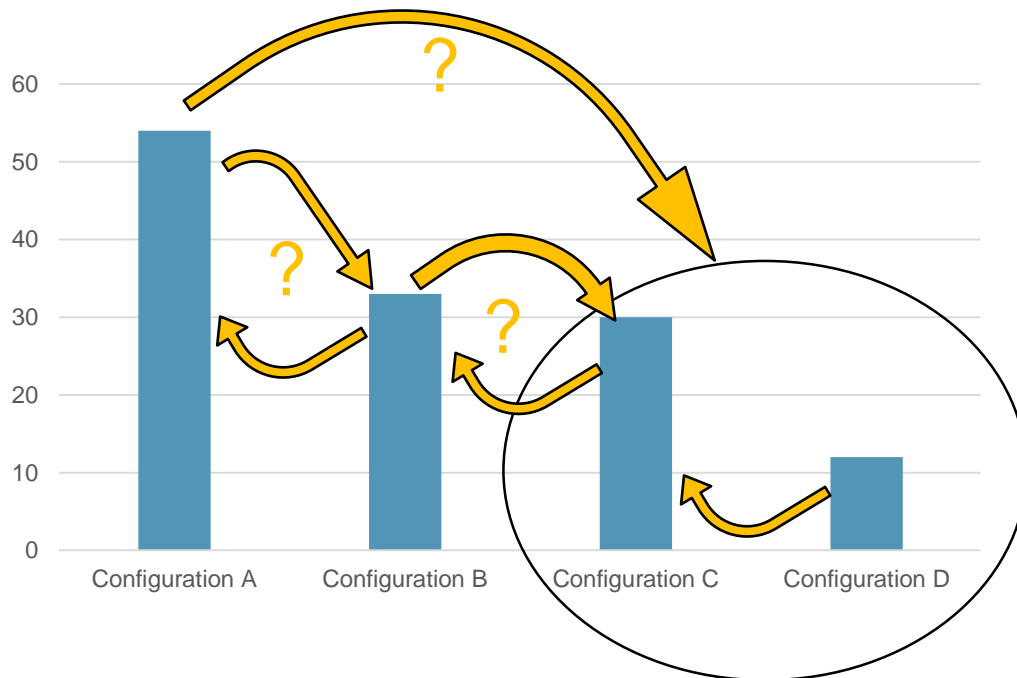
6.2 Who is concerned? Co-manager & co-managees



6. The co-management

6.2 Who is concerned? Results of the survey

Configurations in Luxembourg (May 2019)



Type	Total
A	55
B	33
C	30
D	12

At least 42 Banks envisaged to appoint a co-manager (as per our survey in May 2019)

You will be asked to **confirm your choice** after the infosession (New survey in December 2019)

6. The co-management

6.2 Who is concerned ? Co-managees lighter workloads

Which side will you choose ?

Very low activity

Limited use of CB services

Be a Co-managee

Be a regular participant (or a co-manager)

High or medium volumes

Regular use of CB Services



Delegates most project & production efforts

Does not need an ESMIG access

Holds a MCA

Reporting to BCL

Training, testing and migration activities*

Must secure a NSP to access ESMIG

Holds a MCA



6. The co-management

6.2 Who is concerned ? Co-managers

2 reasons to become a co-manager:

- **[1]** Become a co-manager for «intra-group» purposes only, to co-manage branches or group entities (*can be performed in U2A or A2A, i.e co-manager has a configuration A or B*)
- ~~**[2]** Develop a co-management offer for any third party (in Luxembourg / in Europe) (*should be performed in A2A; i.e co-manager has a configuration A*)~~

In September 2019, the BCL encouraged the Target2 direct participants to develop a Co-management offer towards any third party, in order to support the national banking community.

2 Banks indicated their interest and commit to propose co-management services to MCA holders:



Entities deciding to opt for configuration C can be co-managed by:

- **[1]** a group entity (being a MCA holder and proposing this service)
- **[2]** an external co-manager proposing such services, e.g. BCEE or BIL

6. The co-management

6.2 BIL and BCEE contacts

Target2 Consolidation - MCA Co-Management Contacts



Claude DAHM
Banks & Clearing Institutions
+352 4590 3658
claudе.dahm@bil.com



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Emir ALICKOVIC
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e.alickovic@bcee.lu

6. The co-management

6.3 How does it work ? Minimum set of co-management services

Activity type	Detailed Activity	Purpose
Configure co-managee	Configure co-managee's attributes in CRDM	Implement any static data needed to operate the co-management service
Inform co-managee	Provide MCA end of day reporting	Co-manager informs the co-managed entity about the MCA movements and holdings . Co-managee takes appropriate action (funding / de-funding request, OD request, ...)
	Report on minimum reserves fulfillment	Co-manager informs the co-managed entity about its current (non) fulfillment of minimum reserves obligation . Co-managee takes appropriate action (MCA funding, initiate MLOR)
	Report on overnight deposits (OD)	Co-manager informs the co-manage about the good execution of if its OD request
Instruct Liquidity Transfers on behalf of co-managee	LT from co-managed MCA to third party MCA/DCA	Co-manager executes an MCA de-funding order (for any underlying motivation proper to the co-managee)
	LT from the co-managed MCA to the co-managed overnight deposit account (ODA)	Co-manager executes an OD constitution order
	LT from the co-managed ODA to the co-managed MCA	Co-manager executes an OD reversal order
	LT from the co-managed MCA to BCL MCA	Co-manager executes the 'cash' leg of a bank notes withdrawal order

6. The co-management

6.3 How does it work ? Minimum set of co-management services

A co-management offer **may go beyond the sole mandatory aspects**.

The above categorisation results from BCL's understanding of the 'Co-management' concepts expressed in the Target Consolidation UDFS.

It is not BCL's intention to limit the activities of the entities acting as 'co-manager'.

The 'to-be' co-managers are free to decide whether they will offer or not:

- **cash correspondent activities** to credit a MCA for instance
- **any other related activity** stemming from existing contracts between the 'to-be' co-manager and its clients
- any other activity stemming from a **new service offer** which is not directly in relation with the above tasks but that could improve their efficiency

6. The co-management

6.4 How does it work ? Configuration

The configuration of a 'co-management' relationship is made:

By the co-managee, which (non exhaustive list):

- Fills in MCA related **registration forms** with the BCL indicating his co-manager
- Signs the **T2 Terms and conditions**
- Signs a **bilateral agreement** with the Co-manager

By the Central Bank, which:

- Creates the co-managed bank (**party and accounts**) in CRDM
- At the party level of the co-managed entity, references the **Party Technical Address** (PTA) of the co-manager
- May create a liquidity transfer group (**LTG**) between the co-manager MCA and the co-managed MCA, only if the co-manager offers Cash Correspondent Services to the co-managed entity

By the co-manager, which can set up in CRDM (non exhaustive list):

- Message subscription
- Report configuration
- Standing Order Liquidity Transfer Order
- Standing Orders for Reservation

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7. Readiness, timeline, testing and migration

7.1 Migration Strategy

TARGET Consolidation will be implemented in a 'big bang' mode in November 2021.

- From one day to another, the existing infrastructure will be replaced with a new one.
- The current systems will no longer be maintained after the Go-live. There will be **no grandfathering** period and **no coexistence** of the two infrastructures.
- Unprepared participants will **lose their access to the Target2 services**. They might also no longer be able to **fulfill their mandatory minimum reserves** obligations.

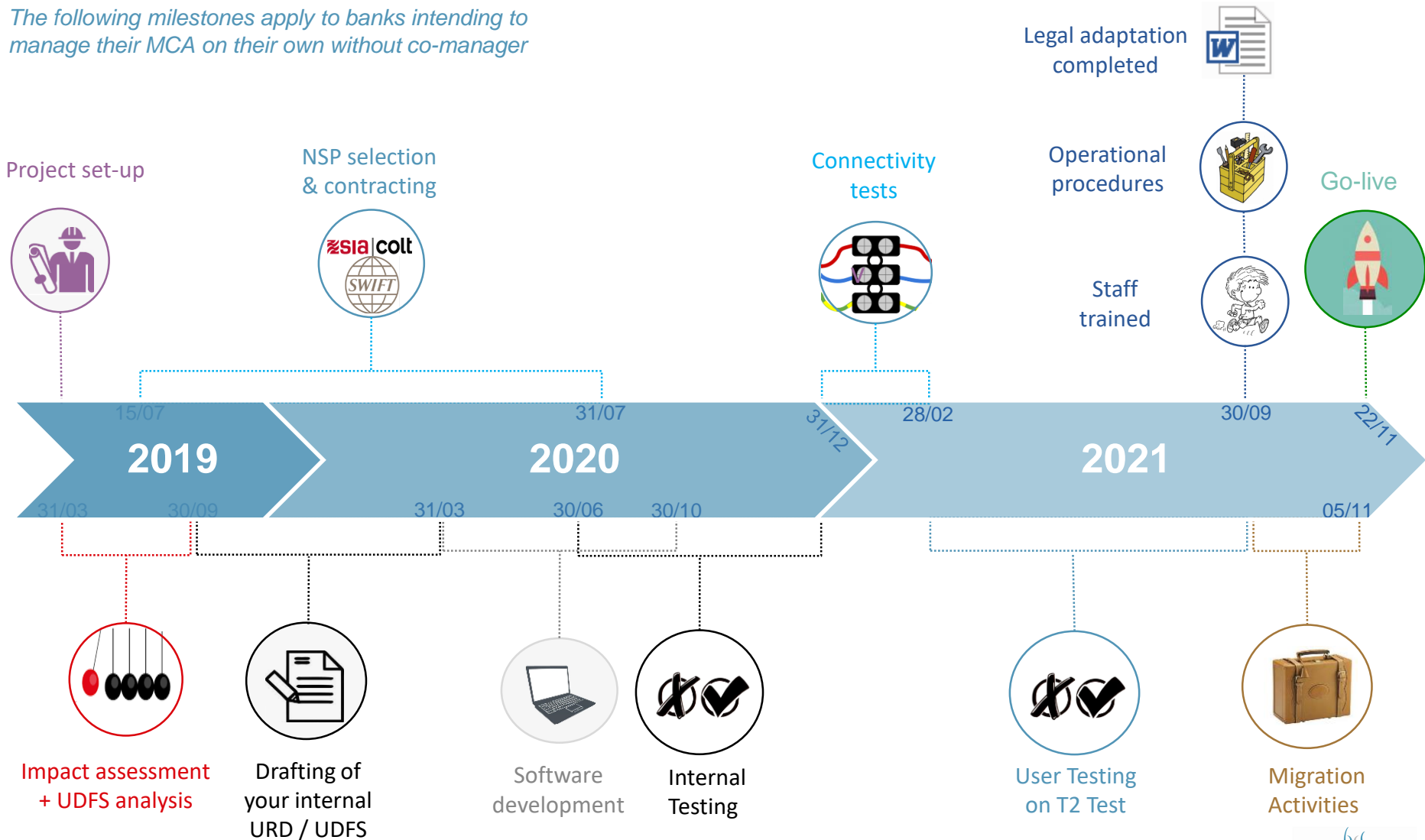
The **banking community readiness will therefore be a key factor for a successful transition**.

With this objective in view, the Eurosystem has designed a readiness framework, whereby the participants will be invited to report periodically their progresses for a series of **key milestones**

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

The following milestones apply to banks intending to manage their MCA on their own without co-manager



7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

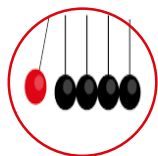
Project Set-up



Completed

- ✓ Participants nominate a project manager and,
- ✓ set-up the project (allocated resources, required budget and started the impact analysis).

Impact assessment



31 March 2019 - 30 September 2019 (6 months)

- ✓ Participants perform the detailed business and technical impact assessment to adapt their IT systems and processes to the changing services of T2. This includes the impact assessment on how to connect their IT systems to T2.
- ✓ Participants analyse the UDFS 2.0 (CLM + RTGS)

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

Drafting of
your internal
URD & UDFS



30 September 2019 - 31 March 2020 (6 months)

- ✓ Participants have started the drafting of their internal *applications* documentation (e.g. business requirements and functional specifications for key functionalities).

Software
development



31 March 2020 - 30 October 2020 (7 months)

- ✓ Participants have started their internal developments to adapt their IT systems and processes to T2.
- ✓ This milestone encompasses software development and also:
 - ✓ (re) mapping of messages
 - ✓ (re) configuration of existing tools
 - ✓ Design of your new T2 operating model

7. Readiness, timeline, testing and migration

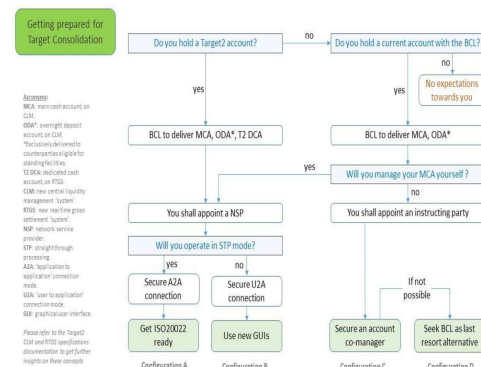
7.2 Overall Key Milestones defined by ECB

NSP selection
& contracting



15 July 2019 - 31 July 2020 (1 year)

- ✓ Participants have developed the selection criteria for the network service providers (e.g. decision on direct or indirect connection, value added services expected from network service providers). **[15/07/2019]**
- ✓ Participants have completed the new connectivity design strategy (e.g. on U2A/A2A) and planning. **[31/12/2019]** – BCL will send you again the “configuration” questionnaire.
- ✓ Participants have selected their network service provider and completed the preparation for the contract signature. **[31/03/2020]**
- ✓ Participants have procured and signed a contract with their selected network service provider. **[31/07/2020]**



+

BCL Infosession with
NSPs

+

Bilateral meetings
with NSPs

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

Internal Testing



30 June 2020 - 31 December 2020 (6 months)

- ✓ Participants have completed their internal testing of key functionalities to enable the User testing and migration.
 - ✓ Validation of internal developments.
 - ✓ Validation of new messages (ISO20022)
- ✓ Participant can use the SWIFT Readiness Portal (provided free of charge) to validate the format of the new ISO 20022 messages they will use.
- ✓ Participant can use other Testing platforms proposed by NSPs (may include additional fees).

https://www.swift.com/our-solutions/compliance-and-shared-services/mystandards/mystandards-readiness-portal_testing-made-simple/for-securities

MyStandards Readiness Portal

The Readiness Portal provides capabilities for autonomous testing the **compliance of messages** with the specifications provided in the User Detailed Functional Specifications (UDFS) and SWIFT MyStandards, while the **progress and results of the tests can be fully monitored**.

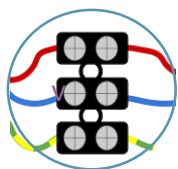
For each of the SWIFT MyStandards subgroups RTGS and CLM a corresponding portal has been set up, which includes respectively the CRDM messages.

As it was meanwhile agreed to extract CRDM messages into a separate subgroup for messages related to common components (CoCo) the respective messages have also to be transferred in a segregated Portal. This Activity will be carried out before Mid September.

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

Connectivity Tests



31 December 2020 - 28 February 2021 (2 months)

- ✓ Participants have completed the connectivity testing on the testing environment and are ready to start the user testing. The ECB will publish a connectivity guide in Q4 2020 to support participants. Connectivity tests consist in:
 - ✓ establishing the A2A connectivity between the Party's systems and ESMIG via NSP;
 - ✓ ability to log on to ESMIG landing page (U2A)

User Testing on T2 Test



1 March 2021 - 30 September 2021 (7 months)

- ✓ Participants have completed the user testing:
 - ✓ Fill test registration forms to be created in UT
 - ✓ Certification tests required by the Eurosystem.
 - ✓ Functional tests – verification of correct end-to-end interaction; includes interoperability, community and business day tests
 - ✓ Migration tests (migration week end dress rehearsals) planned by the ECB to prepare to the migration [start at least 6 months before go-live in UT]
 - ✓ Operational tests – verification of the operational procedures
- ✓ Participants are ready to start the migration activities on the production environment.

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

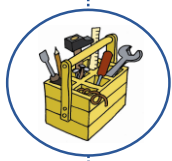
Legal
adaptation
Completed



By 30 September 2021

- ✓ Participants have completed contractual and legal adaptations (e.g. Fill in registration form, adhere to T2 Terms and conditions, co-management agreements...)

Operational
Procedures



- ✓ Participants have completed the operational procedure adaptations.
 - ✓ The Eurosystem will draft an infoguide and a reference data guide for the new T2. Participants will then adapt their internal procedures based on the ECB documentation and based on their internal requirements.

Staff
Trained



- ✓ Participants have completed internal training for the testing and operational activities.
 - ✓ The BCL follow the “train the trainer” approach. Participants will be invited to attend BCL’s training (limited attendance) and then train the rest of their staff internally. BCL’s trainings will take place before the start of UT (01/03/2021).

7. Readiness, timeline, testing and migration

7.2 Overall Key Milestones defined by ECB

Migration Activities

By 5 November 2021



- ✓ Participants have completed the pre-migration activities, e.g. setup reference data (e.g. users, access rights, etc.) on the production environment according to the migration plan (playbook), and are ready for the go-live. Participants prepare their Liquidity transfers needed for the first business day after the migration (migration activities).

Go-live

22 November 2021



- ✓ Go-live of T2 service (first business day)

7. Readiness, timeline, testing and migration

7.2 OVERALL KEY MILESTONES – TABLE VIEW

Project Setup	PSE	T2-T2S Consolidation project set-up	Participants nominate a project manager and set-up the project (allocated resources, required budget and started the impact analysis).	31 December 2018
Internal Adaptations	IAD1	Impact assessment is started	Participants start with the detailed business and technical impact assessment to adapt their IT systems and processes to the changing services of T2. This includes the impact assessment on how to connect their IT systems to T2.	31 March 2019
	IAD2	Impact assessment is completed	Participants have completed the detailed business and technical impact assessment to adapt their IT systems and processes to the changing services of T2. This includes the impact assessment on how to connect their IT systems to T2.	30 September 2019
	IAD3	Drafting of internal applications documentation is started	Participants have started the drafting of their internal applications documentation (e.g. business requirements and functional specifications for key functionalities).	30 September 2019
	IAD4	Drafting of internal applications documentation is completed	Participants have finalised the drafting of their internal applications documentation (e.g. business requirements and functional specifications for key functionalities).	31 March 2020
	IAD5	Software development for the required adaptation changes to T2 is started	Participants have started their internal developments to adapt their IT systems and processes to T2.	31 March 2020
	IAD6	Software development for the required adaptation changes to T2 is completed	Participants have finalised their internal developments to adapt their IT systems and processes to T2.	31 October 2020
	IAD7	Testing of the internal applications is started	Participants have started internal testing.	30 June 2020
	IAD8	Testing of the internal applications is completed	Participants have completed their internal testing of key functionalities to enable the User testing and migration.	31 December 2020
Network Service Provider Procurement Process	NSP1	Network service provider selection criteria development is completed	Participants have developed the selection criteria for the network service providers (e.g. decision on direct or indirect connection, value added services expected from network service providers).	15 July 2019
	NSP2	New connectivity design strategy and planning is completed	Participants have completed the new connectivity design strategy (e.g. on U2A/A2A) and planning.	31 December 2019
	NSP3	Network service provider selection and contract preparation is completed	Participants have selected their network service provider and completed the preparation for the contract signature.	31 March 2020
	NSP4	Network service provider procurement is completed	Participants have procured and signed a contract with their selected network service provider.	31 July 2020
Network Connectivity	NCO1	Network connectivity tests are started	Participants start the connectivity testing on the testing environment before user testing activities.	31 December 2020
	NCO2	Network connectivity tests are completed and user testing activities are ready to start	Participants have completed the connectivity testing on the testing environment and are ready to start the user testing.	28 February 2021
User Testing Activities	UTA	User testing activities (including community and dress rehearsals for the migration) are completed	Participants have completed the user testing and have completed the certification tests required by the Eurosystem. Participants are ready to start the migration activities on the production environment.	30 September 2021
Contractual and Legal Adaptation	CLA	Contractual and legal adaptations are completed	Participants have completed contractual and legal adaptations.	30 September 2021
Internal Staff Training	IST	Internal staff training is completed	Participants have completed internal training for the testing and operational activities.	30 September 2021
Operational Procedure Adaptations	OPA	Operational procedure adaptations are completed	Participants have completed the operational procedure adaptations.	30 September 2021
Migration Activities	MAP	Migration activities on production environment are ready to start	Participants are ready to start the migration activities and to setup reference data (e.g. users, access rights, etc.) on the production environment according to the migration plan.	1 October 2021
	MAE	Migration activities are completed	Participants have completed the pre-migration activities and are ready for the go-live.	5 November 2021
Go-live	GLI		Go-live of T2 service (first business day)	22 November 2021

7. Readiness, timeline, testing and migration

7.3 Monitoring Framework

Reporting Lines

Closely Monitored Participants



Before each milestone

Regularly Monitored Participants



Quarterly basis

Co-managed Participants

Co-manager



TBD

Info sessions & Meeting

BCL info sessions on TARGET Consolidation

(Q4 2019)

Mandatory for 130 Banks - [1-2] staff max/bank

BCL Trainings on TARGET Consolidation

(Q4 2020 / Q1 2021)

Mandatory for all banks instructing their MCA on their own - [1-2] staff max/bank

7. Readiness, timeline, testing and migration

7.4 Next step - NSP selection & contracting

- ✓ Participants have completed the new connectivity design strategy (e.g. on U2A/A2A) and planning.
[31/12/2019] – BCL will send you again the “configuration” questionnaire.

The banking community in Luxembourg

- Existing Target2 participants (33 banks) will hold a DCA on RTGS and a MCA on CLM.
- All other BCL account holders (95 banks) will hold a MCA on CLM.

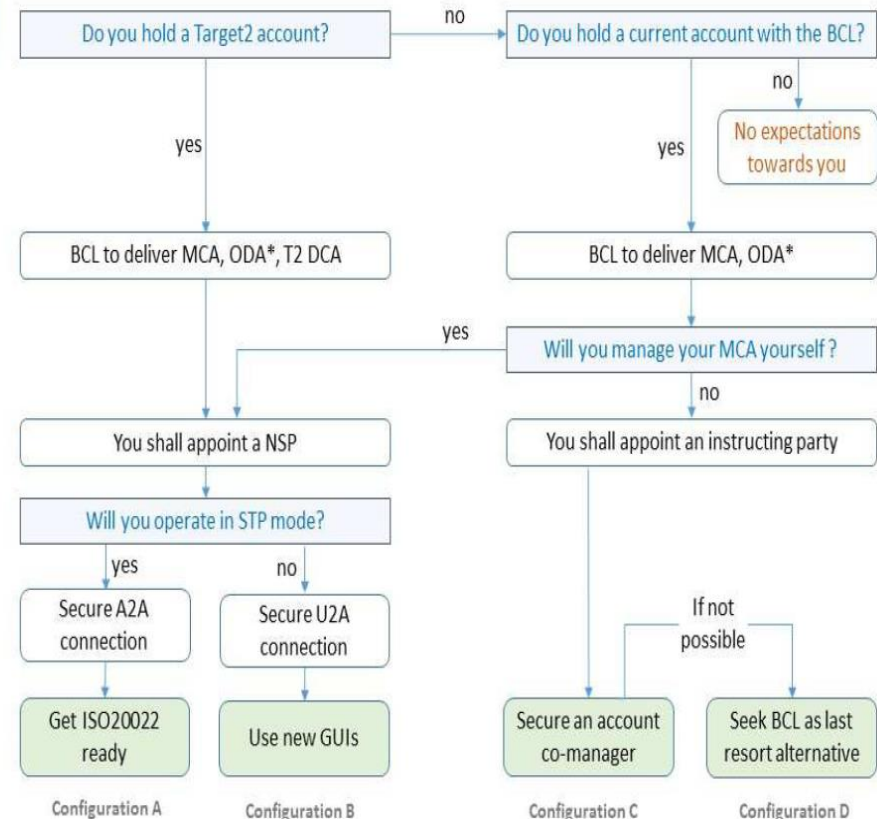
Futur management of accounts

- The BCL asked all the banks how they intend to manage their account in the future T2.
- 4 configurations are envisaged:
 - Direct management via ISO20022 messages
 - Direct management via the Graphical User Interface
 - Delegation of the account management to a « co-manager » (who selected configuration A or B)
 - Delegation of the account management to the BCL

Getting prepared for Target Consolidation

Acronyms:
 MCA: main cash account, on CLM.
 ODA*: overnight deposit account, on CLM.
 *Exclusively delivered to counterparties eligible for standing facilities.
 T2 DCA: dedicated cash account, on RTGS.
 CLM: new central liquidity management 'system'.
 RTGS: new real time gross settlement 'system'.
 NSP: network service provider.
 STP: straightthrough processing.
 A2A: 'application to application' connection mode.
 U2A: 'user to application' connection mode.
 GUI: graphical user interface.

Please refer to the Target2 CLM and RTGS specifications documentation to get further insights on these concepts



AGENDA

1. Introduction
2. The new T2 - overview
3. The new T2 - CLM (Central Liquidity Management)
4. The new T2 - RTGS (Real Time Gross Settlement)
5. The new T2 - the common components
6. The co-management in CLM
7. Readiness, timeline, testing and migration
8. **The Network Service Providers (SIA COLT and SWIFT)**