



# Eurosystem Collateral Management System (ECMS) Project

## Project information



# AGENDA

1. Introduction
2. Accessibility and connectivity
3. Counterparty impact
4. Readiness, timeline, testing and migration
5. ECMS artifacts

# 1. Introduction

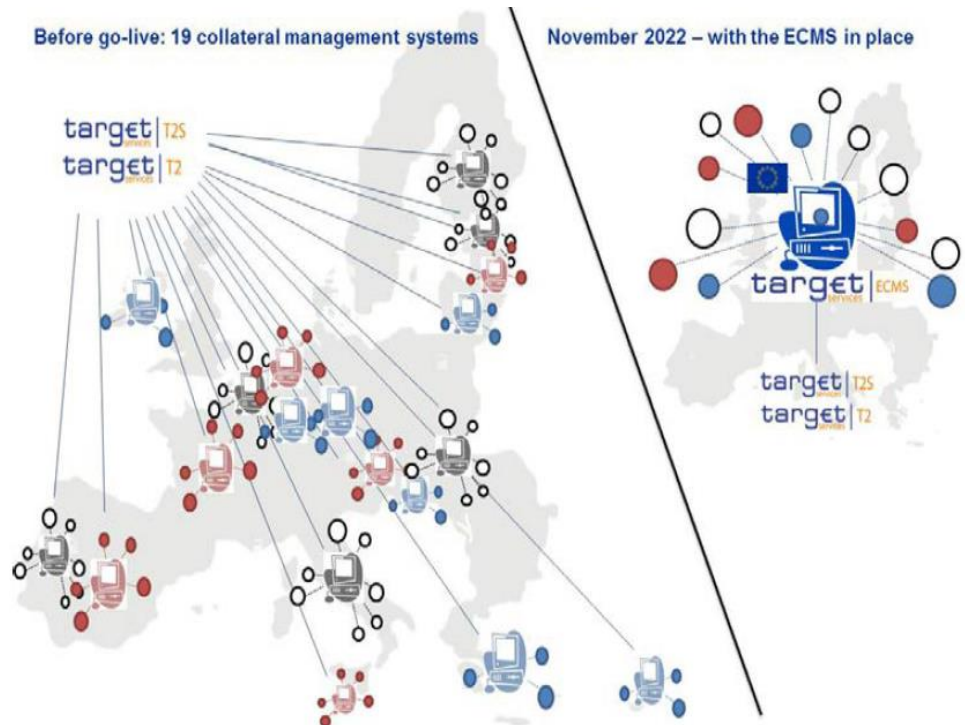
## Why ECMS ?

The Eurosystem Collateral Management System (ECMS) is a back-office system which will replace the 19 local collateral management systems of the National Central Banks (NCBs). The Eurosystem has launched this project to bring all NCBs to operate under the same system.

### Objective:

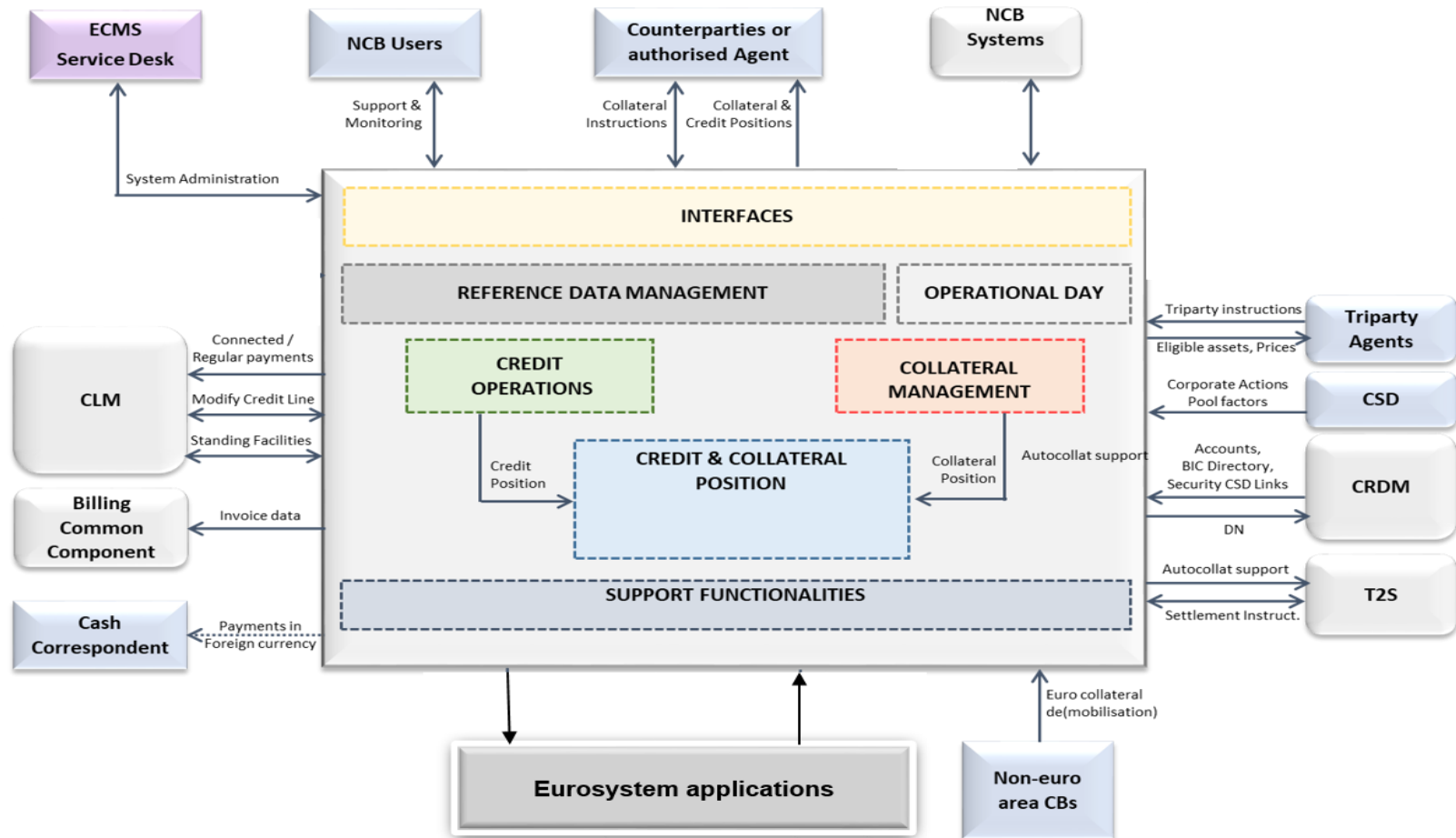
The aim is to ensure a single collateral management system with common functionalities, capable of managing the assets used as collateral in Eurosystem credit operations for all euro area jurisdictions.

**November 2022:** Go-live of the ECMS platform



# 1. Introduction

## Scope of the project



# 1. Introduction

## Scope of the project

- Harmonised collateral management activities:
  - Monetary policy operations
  - Intraday credit
  - Harmonisation standards defined by AMI-SeCo (Triparty Collateral Management, Corporate Actions and billing) will be implemented in ECMS
  - All NCBs relevant activities with regards to collateral management (reporting, monitoring, valuation)
- Collateral:
  - Marketable assets in Euro and in foreign currencies
  - Credit Claims in Euro\*

\* BCL will use the Credit Claims functionalities as of the ECMS go-live. Other NCBs might use this functionality at a later stage

# 1. Introduction

## ECMS and the counterparties

- New features:
  - Connectivity (via ESMIG, in A2A and U2A or in U2A only)
  - Messages (**ISO 20022 mandatory for ECMS**)
  - Some business processes
  - Direct access to the ECMS and its reporting functionalities
  - Terms and conditions
- Potentially new features:
  - Collateral pool structures (to be assessed for each counterparty)
  - Internal procedures
- Unchanged:
  - Bilateral relationship with Banque Centrale du Luxembourg



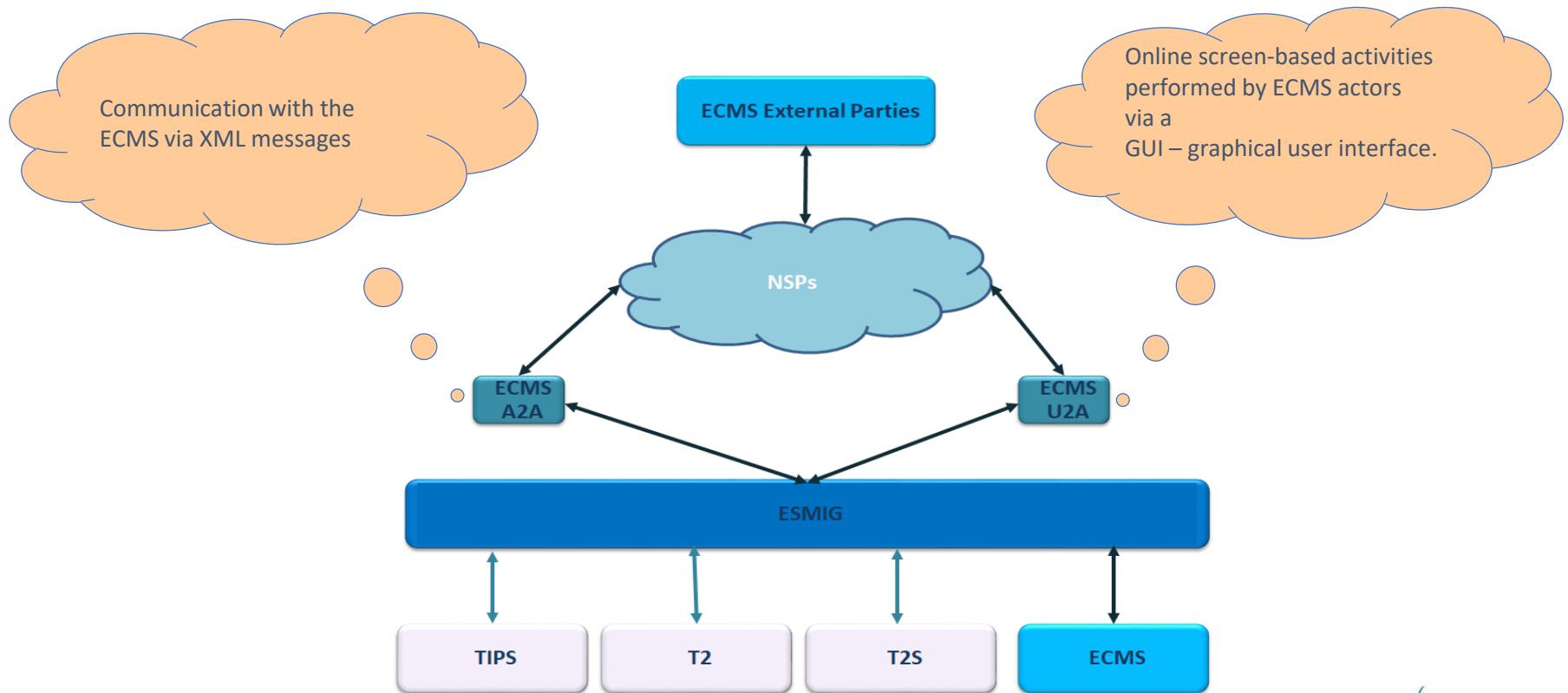
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## 2. Accessibility and connectivity

### Accessibility

ESMIG provides a single entry point to all TARGET services, **including the ECMS**. Therefore, counterparties will be able to use the agreement they signed with the NSPs for Target Consolidation to connect to ECMS.





## 2. Accessibility and connectivity Connectivity

- Modes – **A2A and U2A or U2A only**
- The connectivity guide will contain:
  1. Description of functionality
  2. Checklist
  3. Registration process by NSP
- Authentication and authorization
- Access rights and privileges in ECMS
- Configuration of access rights

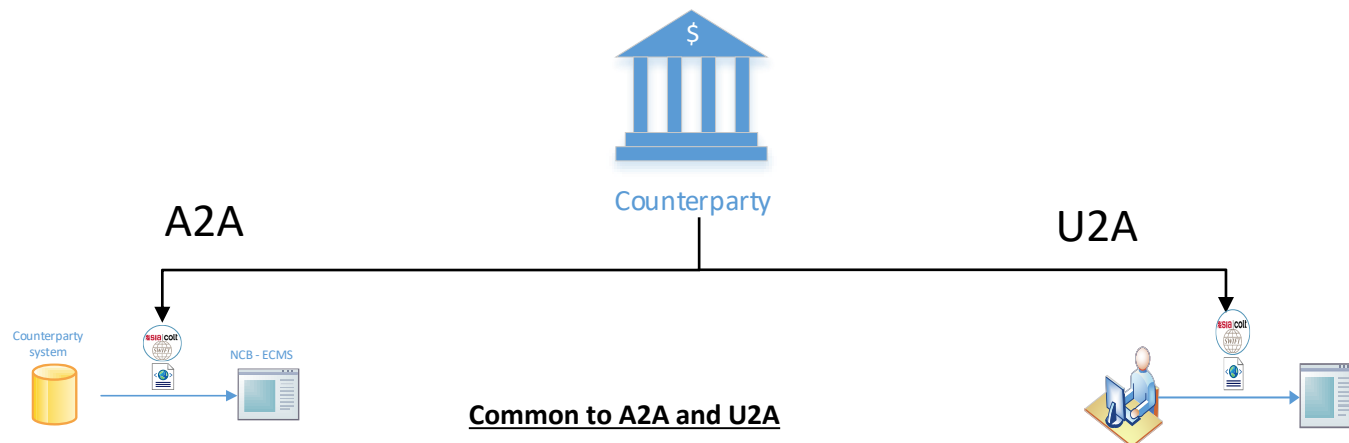
NOTE: The connectivity guide is still being drafted at Eurosystem level. It will be shared with the relevant actors by Q3 2020.



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### 3. Counterparty impact Connectivity modes

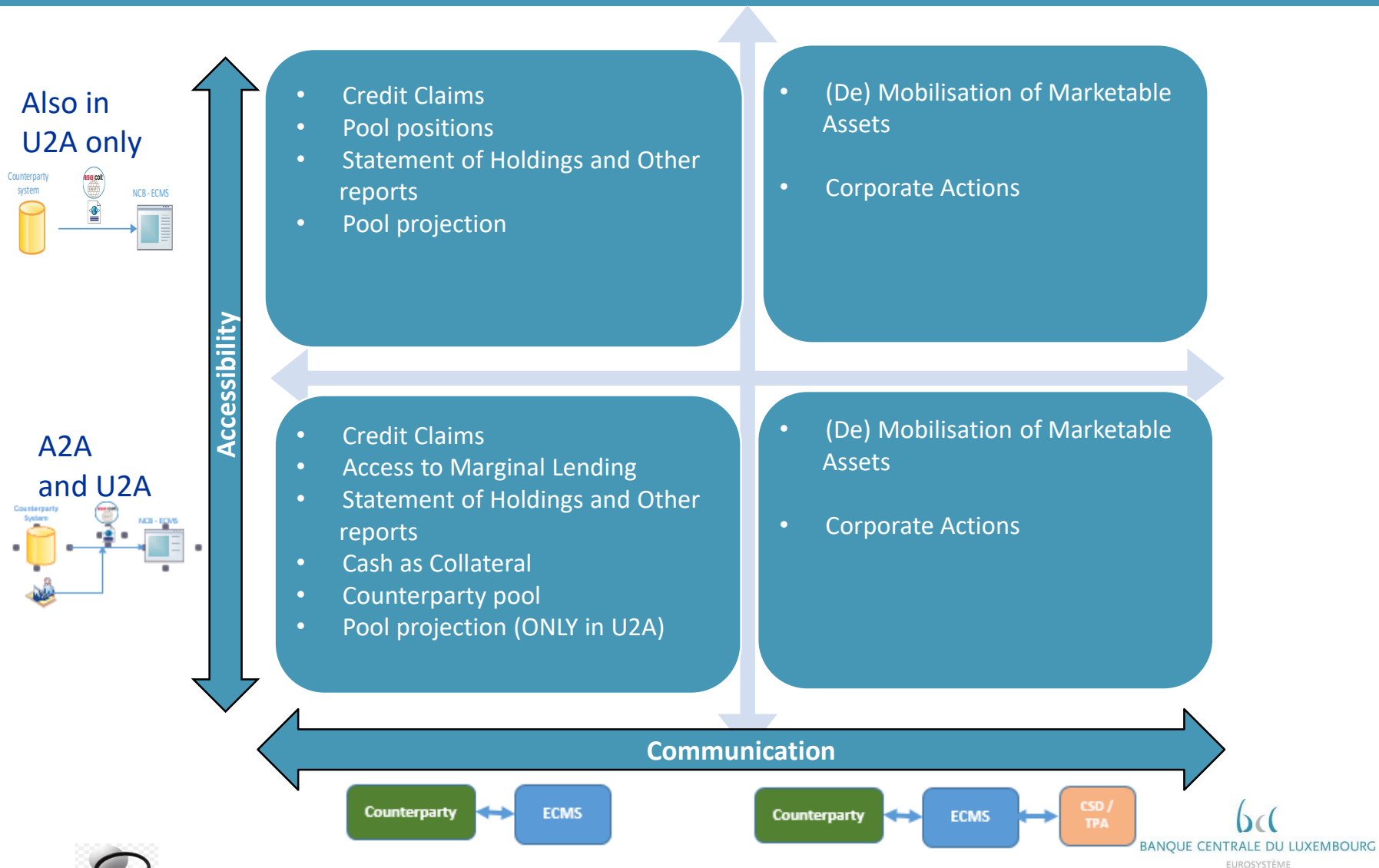


- Counterparty Internal applications should generate ISO 20022 (xml messages) for (de)mobilization instructions

- Follow the defined operating schedule
- Counterparties' internal applications should generate ISO 20022 (xml messages) for (de)mobilization instructions
- Single message structure irrespective of the location of the asset or the mobilisation channel used.

- Counterparty will use GUI (manual input by user) to send (de)mobilization instructions
- Possibility to configure 4-eyes verification

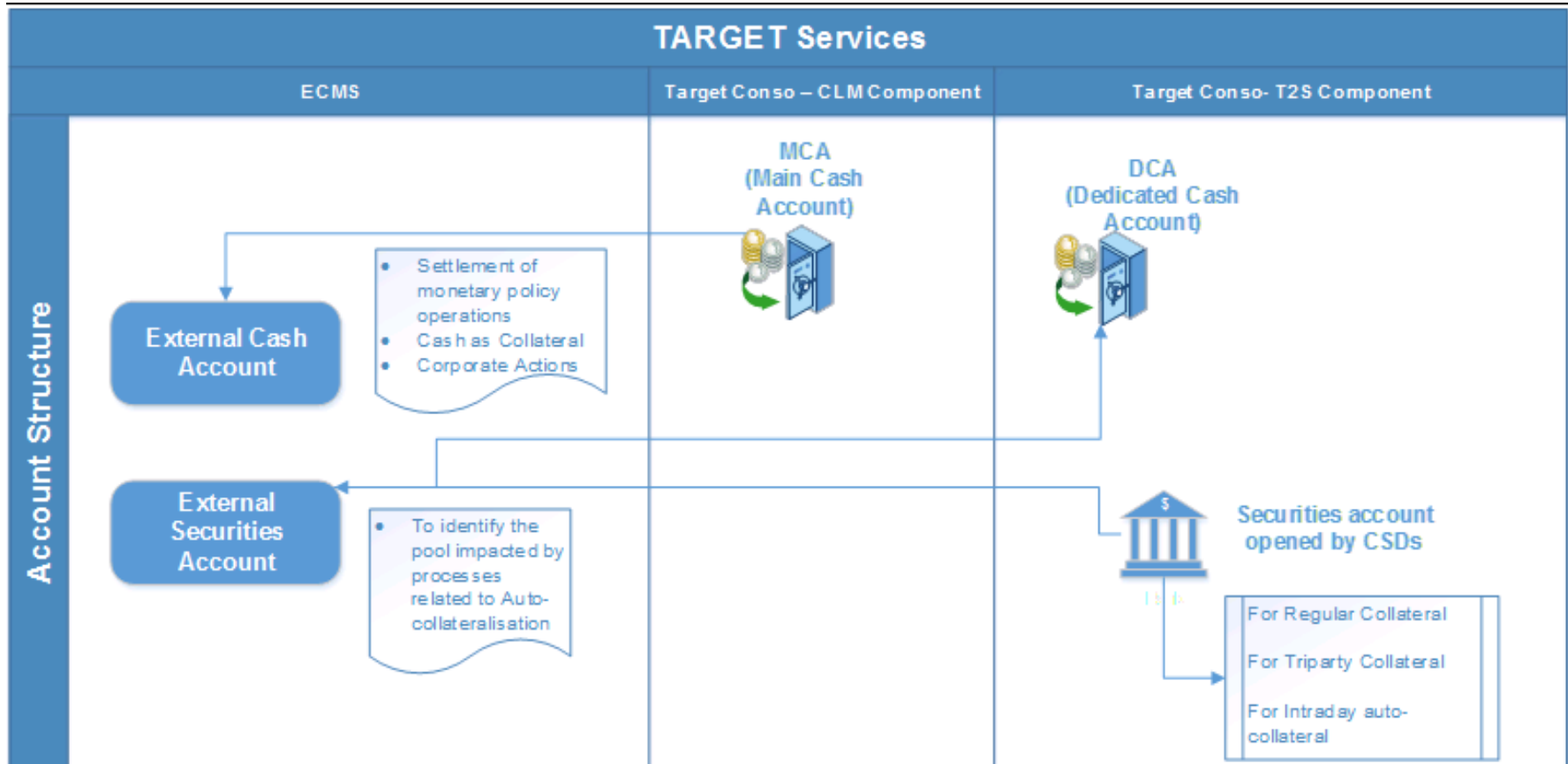
# 3. Counterparty impact Functionalities



# 1. Introduction

## Account Structure

### Accounts Interfaces between different systems

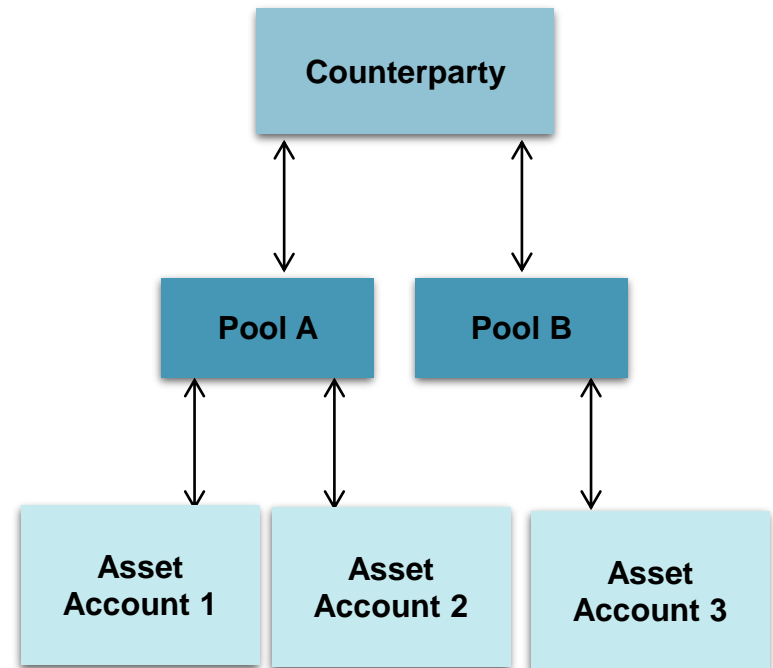


### 3. Counterparty impact

## Account Structure (Accounts and pool)

Each ECMS counterparty asset account will be linked to one (and only one) collateral pool. However each pool can be linked to several ECMS counterparty asset accounts.

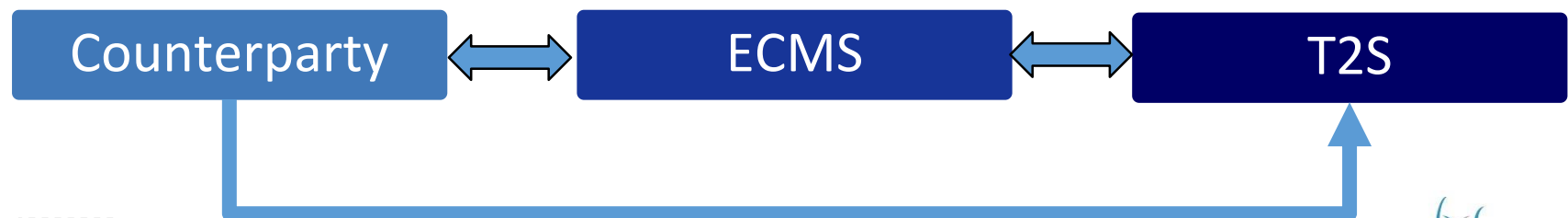
The pools will also be linked to a main cash account (MCA) in order to settle payments related to the operations of that pool.



### 3. Counterparty impact (De) Mobilisation of Marketable Assets

TODAY – BCL Internal System  NOVEMBER 2022

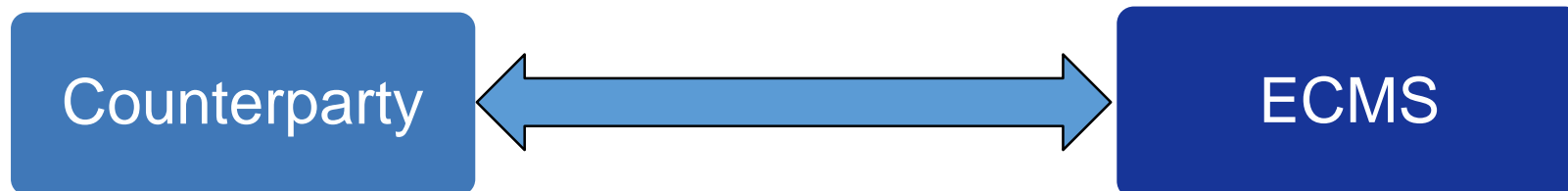
- Counterparty instructions by SWIFT 15022
- No Interface to CMS GUI
- Not possible to check in real time status for any instruction.
- Instructions can be transmitted via A2A or U2A by SWIFT 20022 (XML Messages)
- Cancellations are allowed until the status is not final in ECMS and settlements are not confirmed by T2S
- Future settlement instructions for (de)mobilization are queued until the actual settlement date.
- No instruction with settlement date in the past will be allowed
- Asset position is updated after the settlement confirmation has been received from T2S
- Counterparties can check the position and status of instructions in GUI



### 3. Counterparty impact Credit Claims


TODAY – BCL Internal System  NOVEMBER 2022

- Static data and instructions by SWIFT 15022.
- Standardised file format for static data and instructions
- Credit claim files for same day settlement can be sent until 16:00

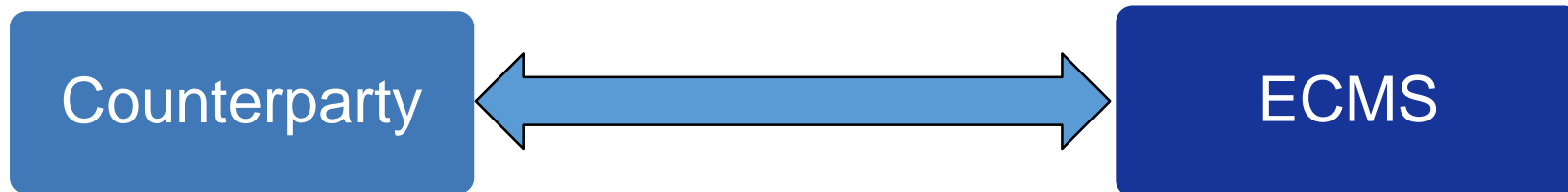




### 3. Counterparty impact Cash as Collateral

TODAY – BCL Internal System  NOVEMBER 2022

- Limits are checked manually before initiating a margin call
- Cash or additional collateral can be provided to honour the margin call
- In the case of cash SWIFT 15022 is used to confirm and to settle the operation.
- Automated process for the calculation, mobilisation and demobilisation of cash intraday
- Instructions can be transmitted via A2A or U2A by SWIFT 20022 (XML Messages)
- Automated end to end process on the basis at the pool level instead of individual counterparty account.

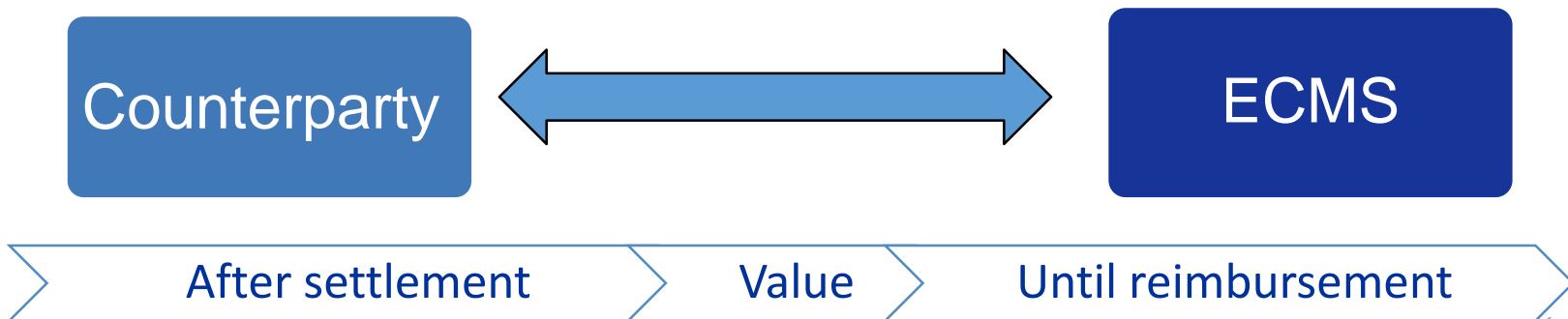


### 3. Counterparty impact

## Fixed Term Deposit as Collateral

TODAY – BCL Internal System  NOVEMBER 2022

- Fixed term deposits are automatically eligible as collateral
- SWIFT 15022 is used to confirm and to settle this operation.
- Value of the position includes accrued interest towards the total available collateral.
- Daily accrual of interest until maturity
- Position is created in the counterparty pool.
- Value of the position includes accrued interest towards the total available collateral.
- Daily accrual of interest until maturity

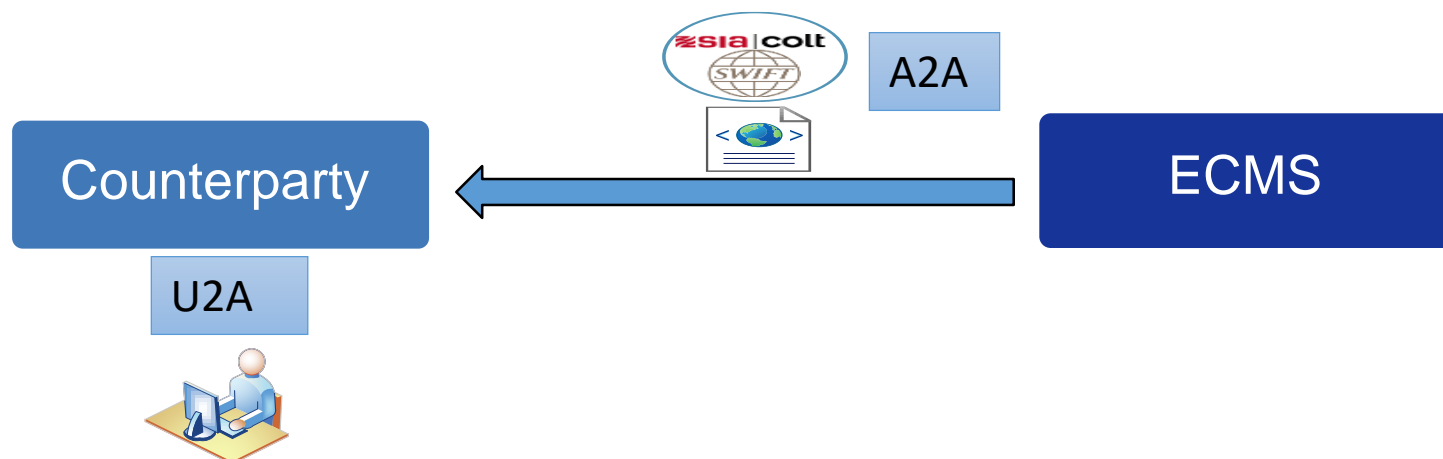


### 3. Counterparty impact

## Statements of holding and other reports

TODAY – BCL Internal System  NOVEMBER 2022

- Statement of holdings are provided in SWIFT 15022.
- No U2A Mode available.
- Statements of holdings, Transactions and Pending transactions are available to Counterparties.
- Subscription based functionality available in both A2A and U2A Mode.

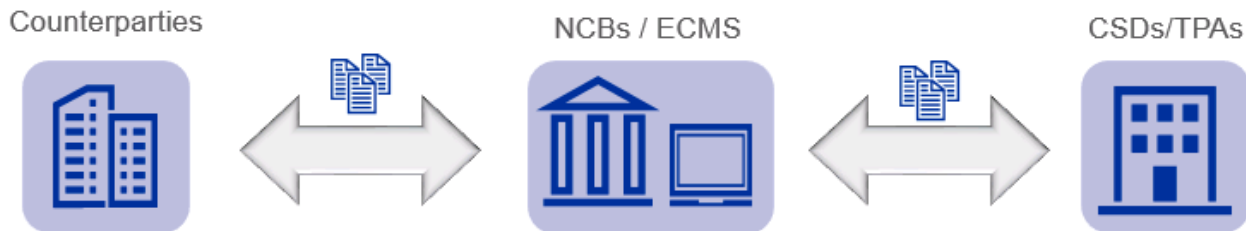


### 3. Counterparty impact Corporate Actions

TODAY – BCL Internal System  NOVEMBER 2022

- SWIFT 15022 based communication for cash and positions related corporate actions
- Corporate actions functionality in ECMS is defined based on the AMI-SeCo corporate action standards
- Combination of e-mail and Swift
- SWIFT ISO 20022 based communication
- Available in both U2A and A2A Mode

#### High level flow in ECMS

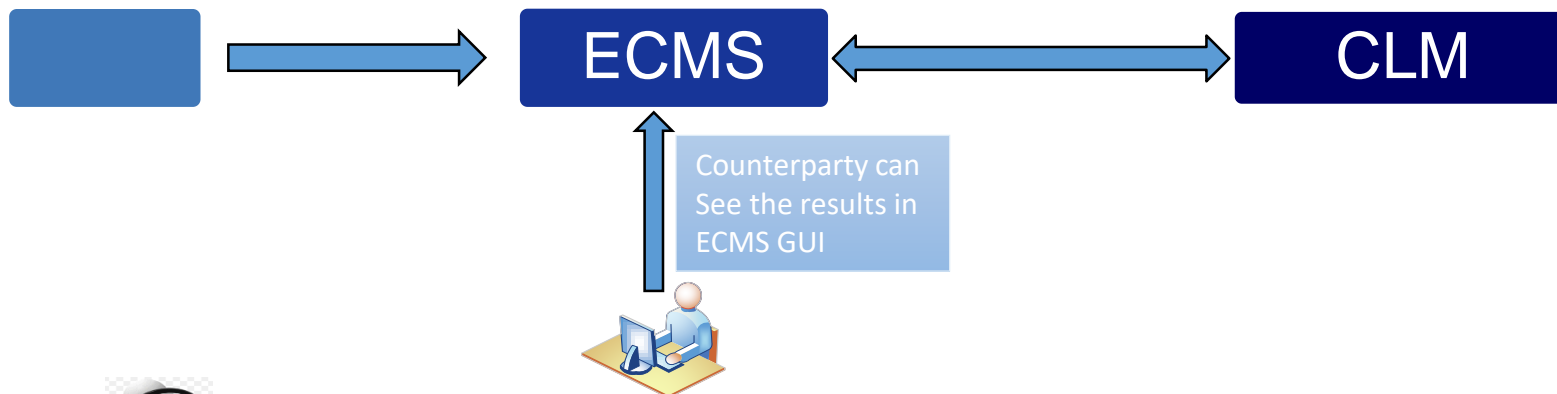


### 3. Counterparty impact Monetary Policy Operations

TODAY – BCL Internal System  NOVEMBER 2022

- Operations are confirmed and settled using SWIFT 15022
- Settlement is done on the current account of the counterparty or in Target2
- No netting
- ECMS records only the results of monetary policy operations
- Netting of payments, settlement done on the MCA of the counterparty

Tender results

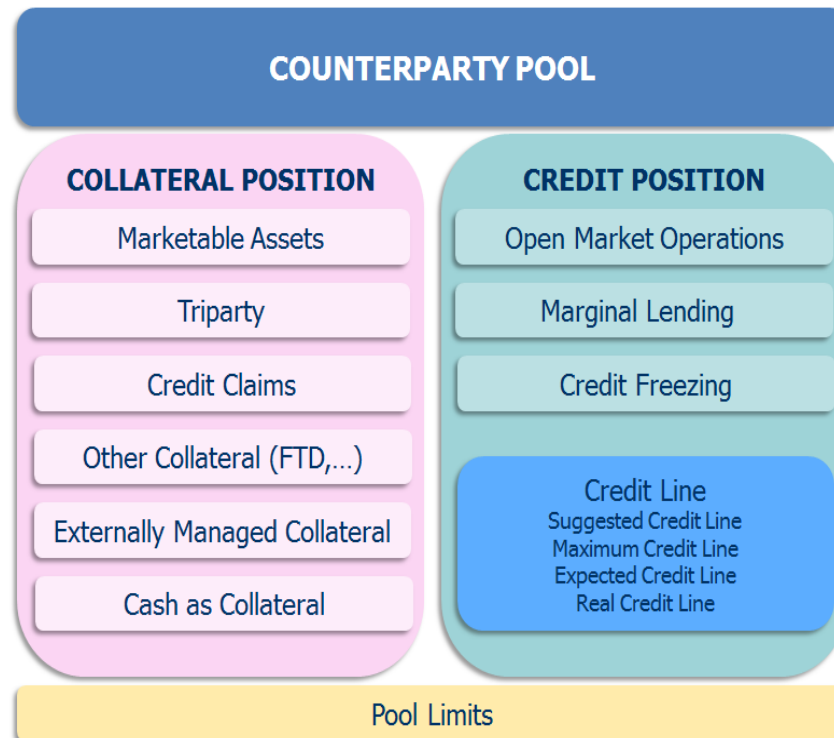


*ECMS info pack – Settlement of open market operations*



### 3. Counterparty impact Counterparty pool

- Access to pool positions via A2A and U2A.
- Counterparty is authorised to request increase or decrease of its credit freezing position.
- Summary on the credit line management
- At the discretion of NCBs, pool projection is made available to counterparties in U2A Mode.



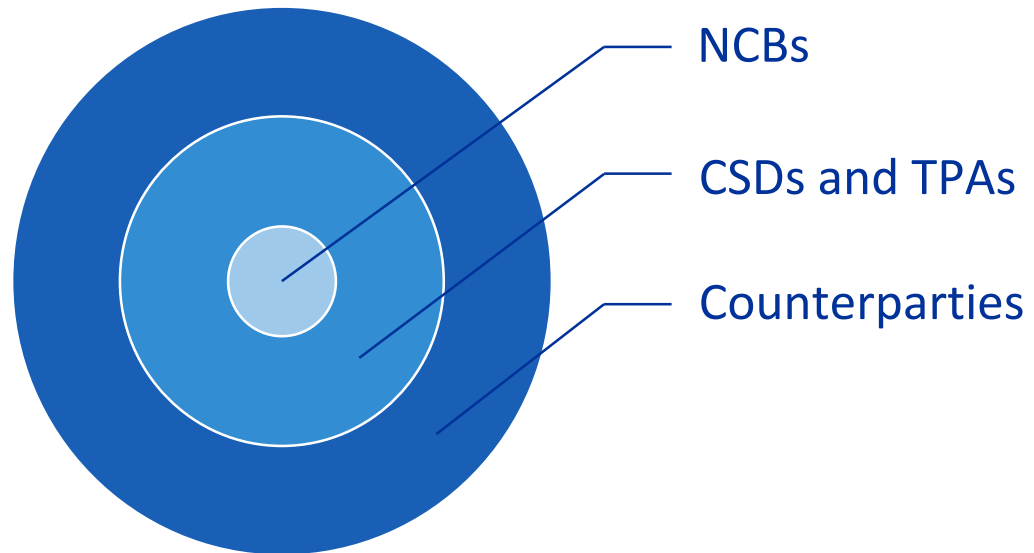


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## 4. Readiness, timeline, testing and migration ECMS Community

Who needs to be  
ready ?





## 4. Readiness, timeline, testing and migration Migration Strategy

ECMS will be implemented in a 'big bang' mode in November 2022.

- 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.
- Unprepared participants will not be able to get Eurosystem credit.

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

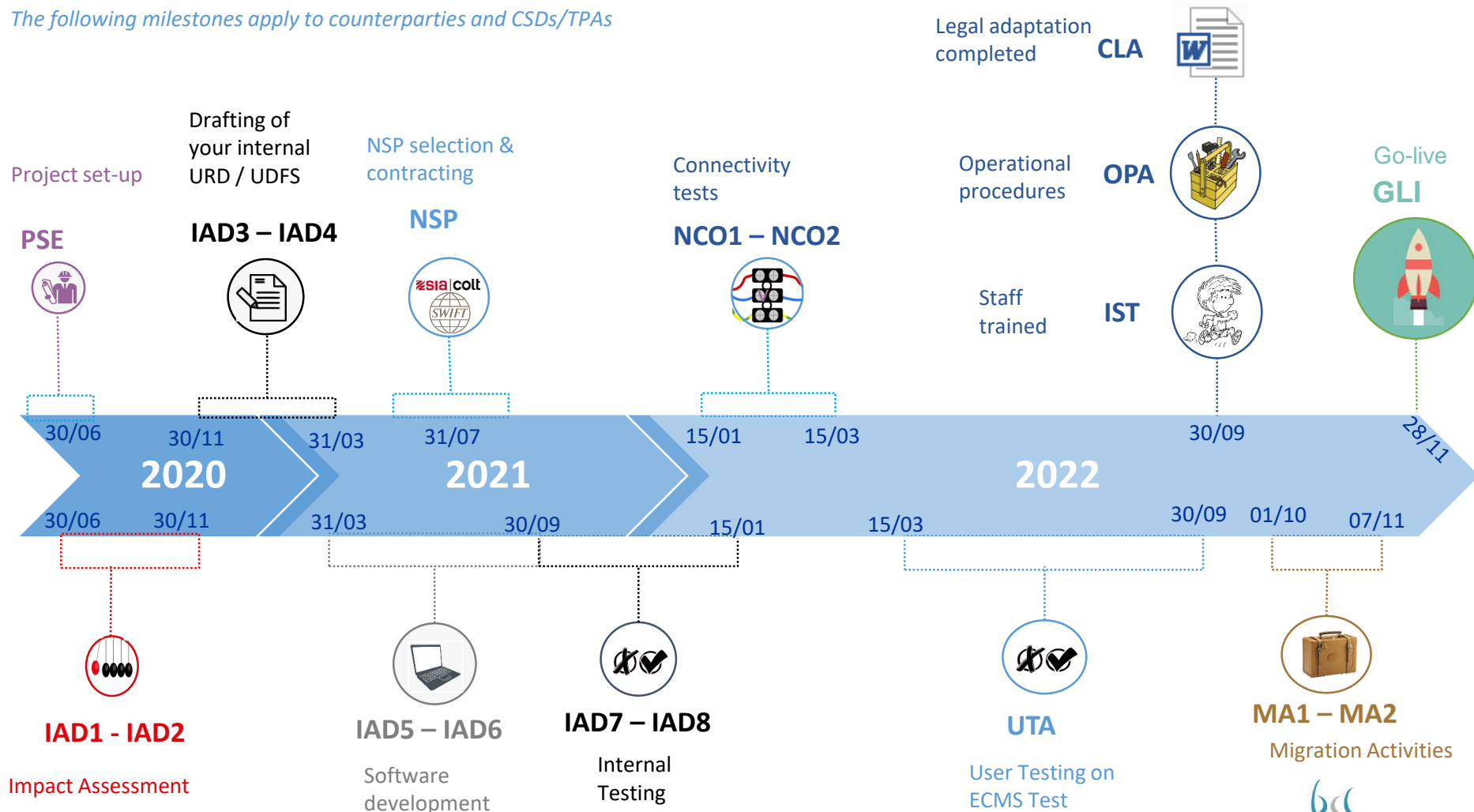
With this objective in mind, the Eurosystem has designed a readiness framework whereby the participants will be invited to report periodically their adaptation progresses for a series of **key milestones.**



# 4. Readiness, timeline, testing and migration

## Overall Key Milestones defined by the Eurosystem

The following milestones apply to counterparties and CSDs/TPAs



## 4. Readiness, timeline, testing and migration

### Overall Key Milestones defined by the Eurosystem

#### Project Set-up

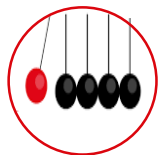


PSE

By end Q2 2020

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

#### Impact assessment



IAD1 - IAD2

Q3-Q4 2020

- ✓ Participants perform the detailed business and technical impact assessment to adapt their IT systems and processes to the changing services of ECMS. This includes the impact assessment on how to connect their IT systems to ECMS.



## 4. Readiness, timeline, testing and migration

### Overall Key Milestones defined by the Eurosystem

Drafting of  
your internal  
URD & UDFS



**IAD3 – IAD4**

Q4 2020 – end Q1 2021

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

Software  
development



**IAD5 – IAD6**

Q2 - Q3 2021

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



## 4. Readiness, timeline, testing and migration

### Overall Key Milestones defined by the Eurosystem

Internal  
Testing

Q4 2021 - Q1 2022



**IAD7 – IAD8**

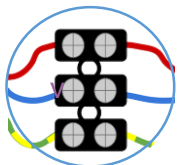
- ✓ Participants have completed their internal testing of key functionalities to enable the User testing and migration.
  - ✓ Validation of internal developments.
  - ✓ Validation of new messages (ISO20022)
- ✓ Participant can use the SWIFT Readiness Portal to validate the format of the new ISO 20022 messages they will use.



# 4. Readiness, timeline, testing and migration

## Overall Key Milestones defined by the Eurosystem

### Connectivity Tests



**NCO1 – NCO2**

Q1 - 2022

- ✓ Participants have completed the connectivity testing on the testing environment and are ready to start the user testing. Connectivity tests consist in:
  - ✓ establishing the A2A connectivity between the Party's systems and ESMIG via NSPs;
  - ✓ ability to log on to ESMIG landing page (U2A)

### User Testing on ECMS Test



**UTA**

Q3 - 2022



# 4. Readiness, timeline, testing and migration

## Overall Key Milestones defined by the Eurosystem

Legal  
adaptation  
Completed



CLA

Q3 - 2022

- ✓ Participants have completed contractual and legal adaptations (e.g. Fill in registration form,...)

- ✓ Participants have completed the operational procedure adaptations.

- ✓ The Eurosystem will draft a Manual of Operational Procedures (MOP) for the new ECMS. Participants will then adapt their internal procedures based on this common MOP and based on their internal requirements.

Operational  
Procedures



OPA

- ✓ 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 (01/03/2022).

Staff  
Trained



IST



# 4. Readiness, timeline, testing and migration

## Overall Key Milestones defined by the Eurosystem

### Migration Activities

Q4 - 2022



**MA1 – MA2**

- ✓ 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

28 November 2022



**GLI**

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





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## 5. ECMS Artifacts



Business  
Description  
Document (BDD)



Connectivity  
Guide\*



Other Supporting  
Documents



[https://www.ecb.europa.eu/paym/target/ecms/shared/pdf/Business\\_Description\\_Document\\_of\\_ECMS\\_v1.pdf](https://www.ecb.europa.eu/paym/target/ecms/shared/pdf/Business_Description_Document_of_ECMS_v1.pdf)

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

\* Will be available in Q3 2020

# Glossary

ITEM	Description
A2A	<b>Application-to-Application.</b> A technical mode of communication that permits the exchange of information between different software applications without a graphical user interface.
BDD	Business Description Document
CB	Central Bank
CLM	<b>Central Liquidity Management.</b> Target component managing funds and credit lines for Counterparties with own MCA as well as cash withdrawals and central bank operations
CMS	Collateral Management System
CSD	Central Securities Depository
DCA	Dedicated Cash Account
ECMS	Eurosystem Collateral Management System
ECMS actor	Any legal entity or organisation interacting with the ECMS for the purpose of collateral management. ECMS actors are: Counterparties or authorised agent, Central Security Depositories (CSD), Triparty Agents (TPA), NCBs, non-euro Central Banks, Cash Correspondent
ESMIG	<b>Eurosystem Single Infrastructure Gateway.</b> The ESMIG provides the single access point for the external communication to all market infrastructure services (ECMS, T2, T2S, TIPS). The ESMIG ensures a network agnostic communication with the users, where network agnostic means multiple network providers are allowed.
GUI	Graphical User Interface
NSP	<b>Network Service Provider .</b> The ECMS actors can choose their preferred NSP, which fulfils the ECMS Connectivity Requirements and passes the relevant compliance checks. The NSP provides the ECMS Actors the means to access the ECMS, in addition to providing network connectivity, messaging services (U2A and A2A), security services, and operational services.
T2S	Target2-Securities
TPA	Triparty Agent
U2A	User-to-Application. A mode of technical communication that permits the exchange of information between software applications of the ECMS and a ECMS system user through a graphical user interface

# Readiness Glossary

ITEM	Description
CLA	Contractual and legal adaptations completed
GLI	Go-Live
IAD1	Impact Assessment Started
IAD2	Impact Assessment Completed
IAD3	Drafting of internal applications documentation started
IAD4	Drafting of internal applications documentation completed
IAD5	Software adaptation changes to ECMS started
IAD6	Software adaptation changes to ECMS completed
IAD7	Internal testing started
IAD8	Internal testing completed
IST	Internal staff testing completed
MA1	Ready to start migration activity
MA2	Migration activities completed
MCA	Main Cash Account
NCO1	Ready to start connectivity testing
NCO2	Connectivity testing completed
OPA	Operational procedure adaptations completed
PSE	Project Set-up
UTA	User testing completed



Contact at BCL : [ecms.lu@bcl.lu](mailto:ecms.lu@bcl.lu)