

# Eurosystem Collateral Management System

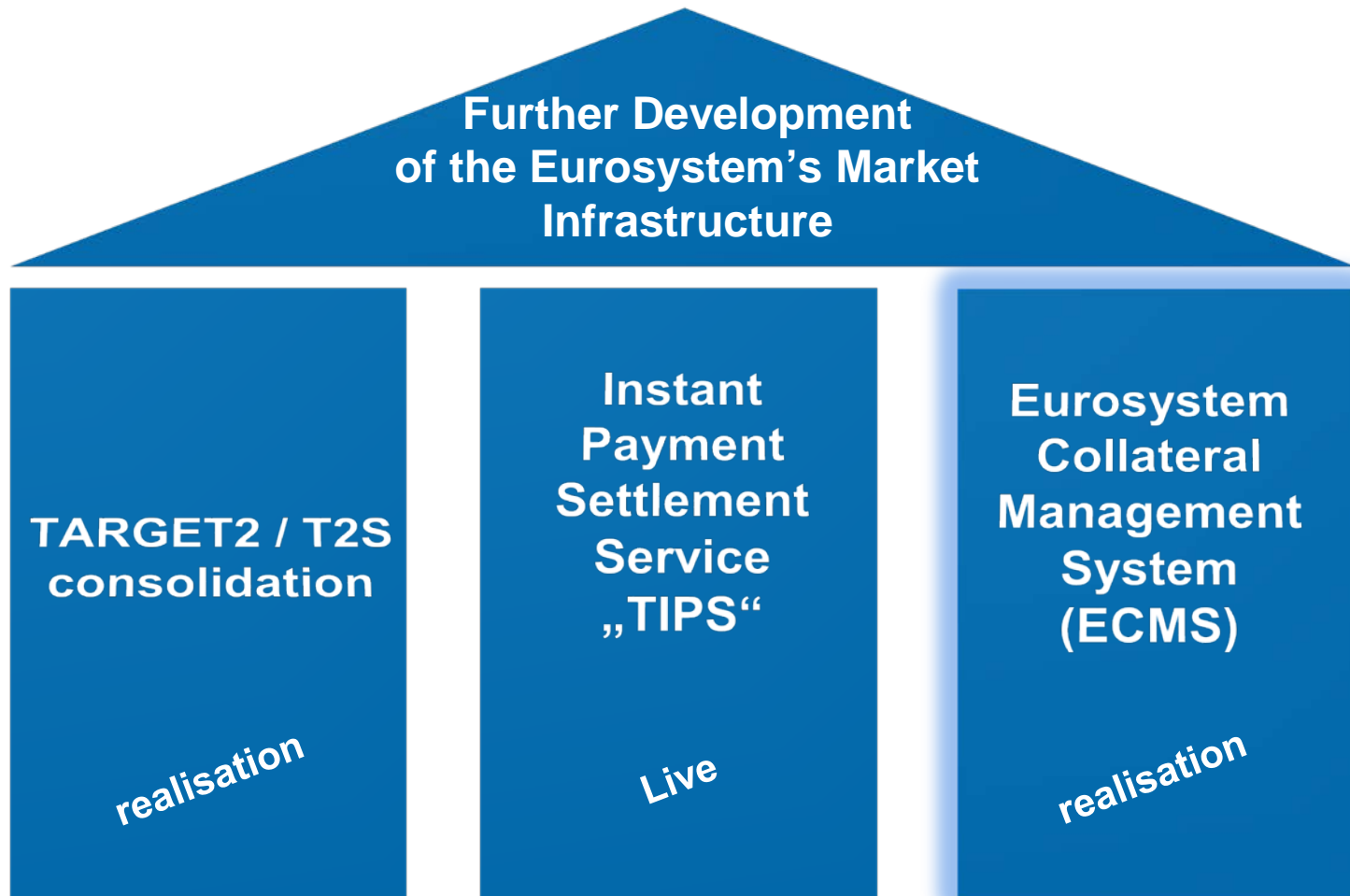
Unified Collateral Management System for the  
Eurosystem

Frankfurt am Main, 19 and 23 November 2020

# Eurosystem Collateral Management System Agenda

1. **ECMS – an introduction**
2. **The functionalities of ECMS**
3. **Changes accompanying the introduction of ECMS**
4. **Local particularities in future Collateral Management**
5. **Project timeline**
6. **Community Readiness Monitoring of the Eurosystem**
7. **Support by the Bundesbank**

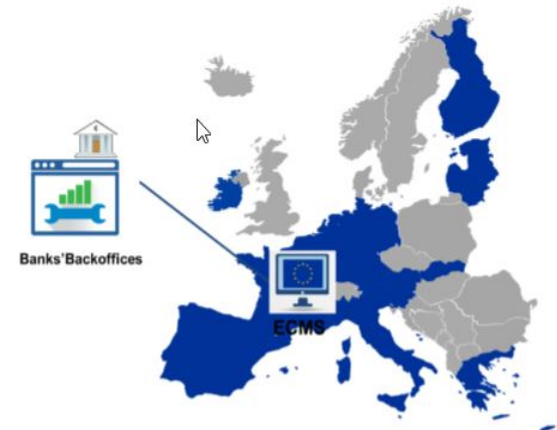
1. **ECMS – an introduction**
2. The functionalities of ECMS
3. Changes accompanying the introduction of ECMS
4. Local particularities in future Collateral Management
5. Project timeline
6. Community Readiness Monitoring of the Eurosystem
7. Support by the Bundesbank

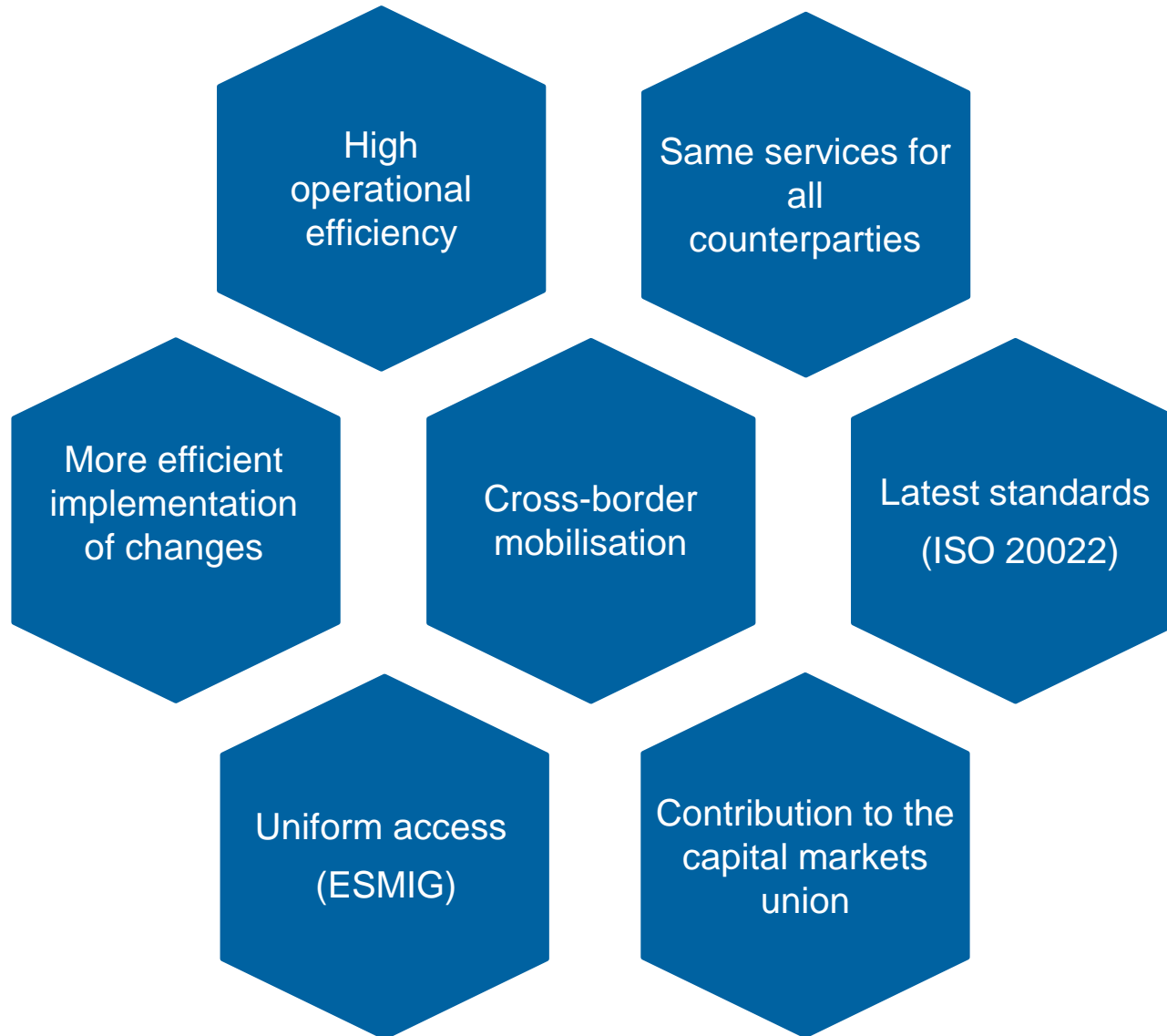


# ECMS

## What is ECMS?

- ECMS will be a **unified system for the management of eligible assets** used as collateral for Eurosystem credit operations.
- It will **largely replace** the 19 existing systems of the national central banks.
- The relationship between the national central banks and their counterparties will **remain unchanged**.
- The go-live of ECMS is planned for **November 2023**, as “**Big Bang**”.





- A credit institution that is not connected to ECMS after the „go-live“ in November 2023 **will no longer:**
  - be able to query the monetary policy collateral account
  - have access to central bank money through Bundesbank credit operations:
    - Intraday credit
    - Overnight credit
    - Open market operations
  
- It is therefore important that you implement the following **measures** in time:
  - Analysis of the effects through the connection to ECMS
  - Creation of project capacities and acquisition of know-how
  - Planning the project budget
  - Planning of necessary adjustments to your systems and, if necessary, run tests
  
- The Eurosystem has set up a **community readiness monitoring** to support the project.

1. ECMS – an introduction
- 2. The functionalities of ECMS**
3. Changes accompanying the introduction of ECMS
4. Local particularities in future Collateral Management
5. Project timeline
6. Community Readiness Monitoring of the Eurosystem
7. Support by the Bundesbank

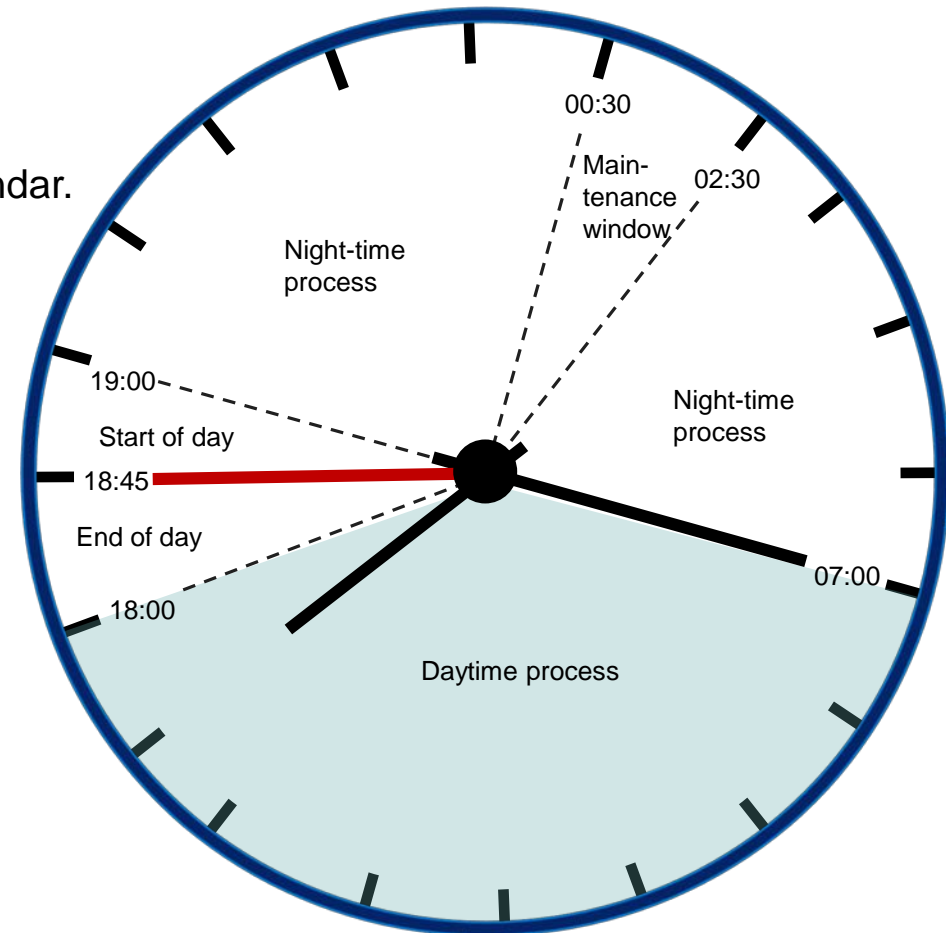


### – Business days:

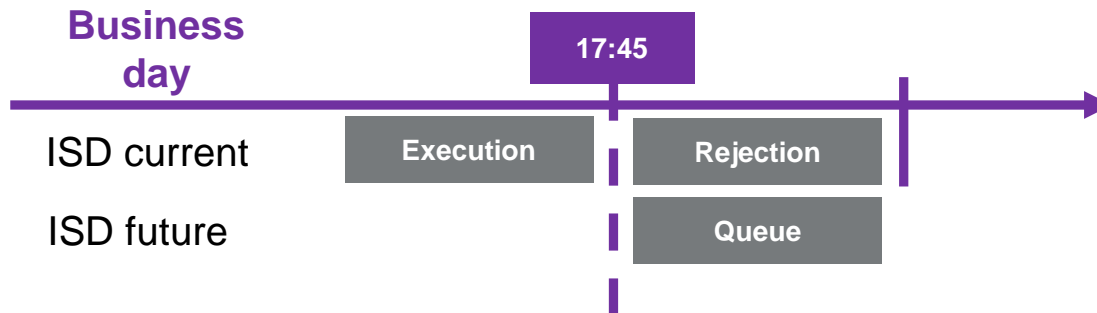
- Monday to Friday;
- Same holidays as the Central Liquidity Management (CLM) calendar.
- Start of ECMS business day depends on CLM

### – The **business day** is divided into:

- Start of day (18:45-19:00)
- Night-time process (19:00-07:00)
- Maintenance window (00:30-02:30)
- Daytime process (07:00-17.45)
- End of day process (18:00-18:45)

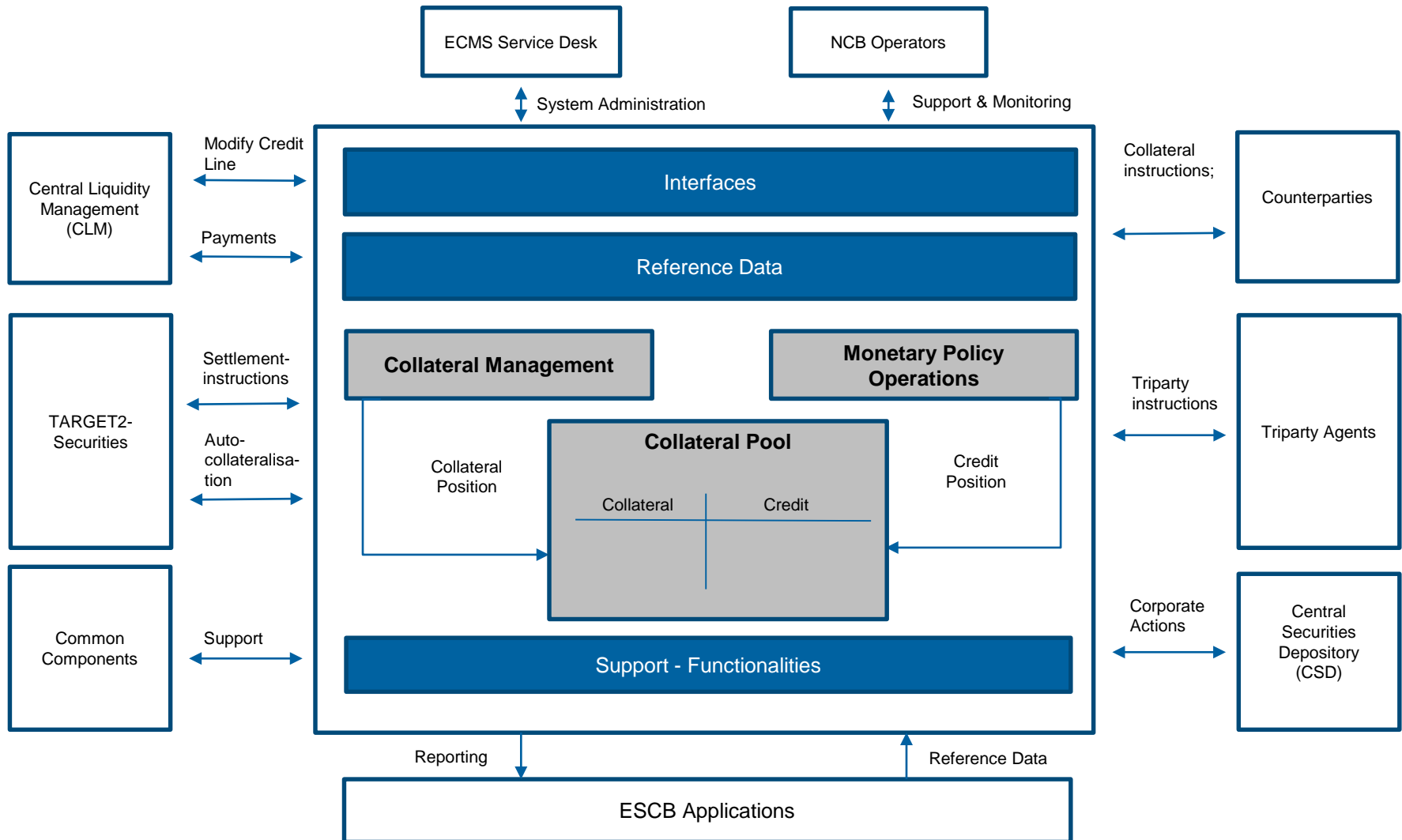


- **Marketable assets:** **Currently**, (de)mobilisation instructions are processed until 17:45 on the intended settlement date (ISD) or are subsequently rejected. **In the future**, (de)mobilisation instructions will be queued from 17:45.

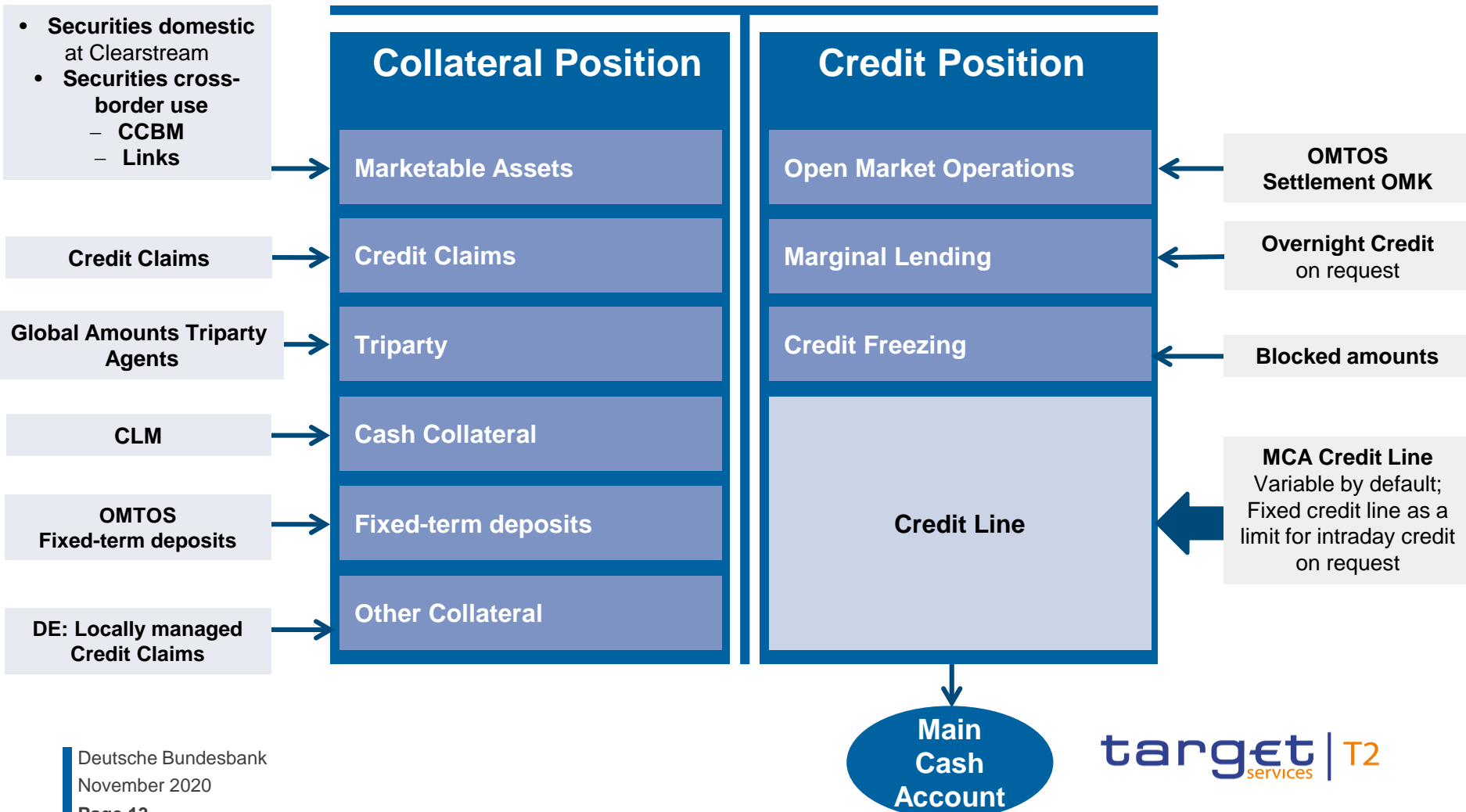


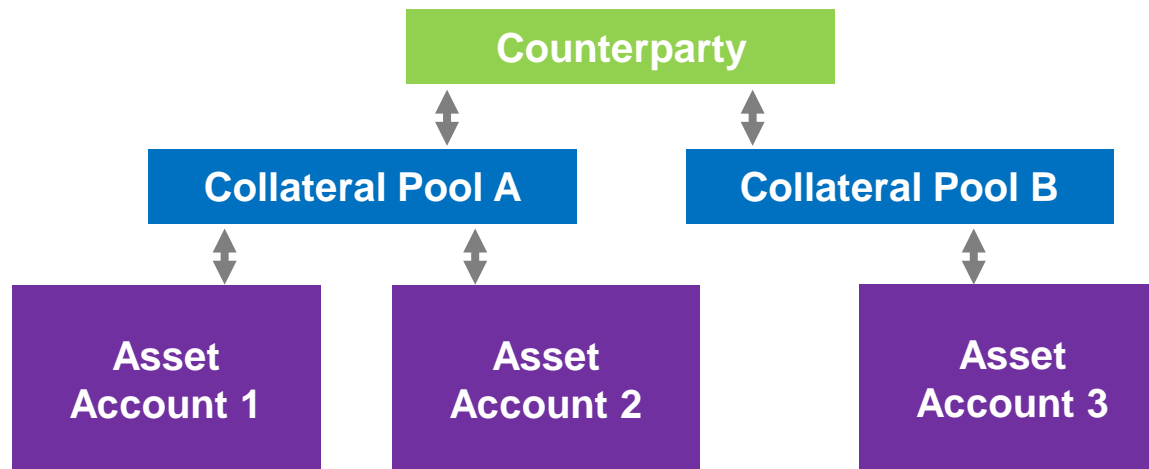
- Marginal lending on request can be instructed until 18:15 / 18:30 and will be processed immediately after.
- The **maximum credit line** can be changed from 7:00 to 17:45.

- Each individual user is assigned at least one predefined **role** (set of privileges).
- Each privilege relates to a **business function** that the user can perform in either “read-only” or “execution” mode.
- In U2A mode, the ECMS may be configured to require four-eye verification.
- Counterparties may designate another entity to interact with the ECMS on their behalf.
- Banking groups can designate an entity as “**manager**” with access to aggregated information on the whole group and detailed information on the pool position of each member of its group.



### Collateral Pool





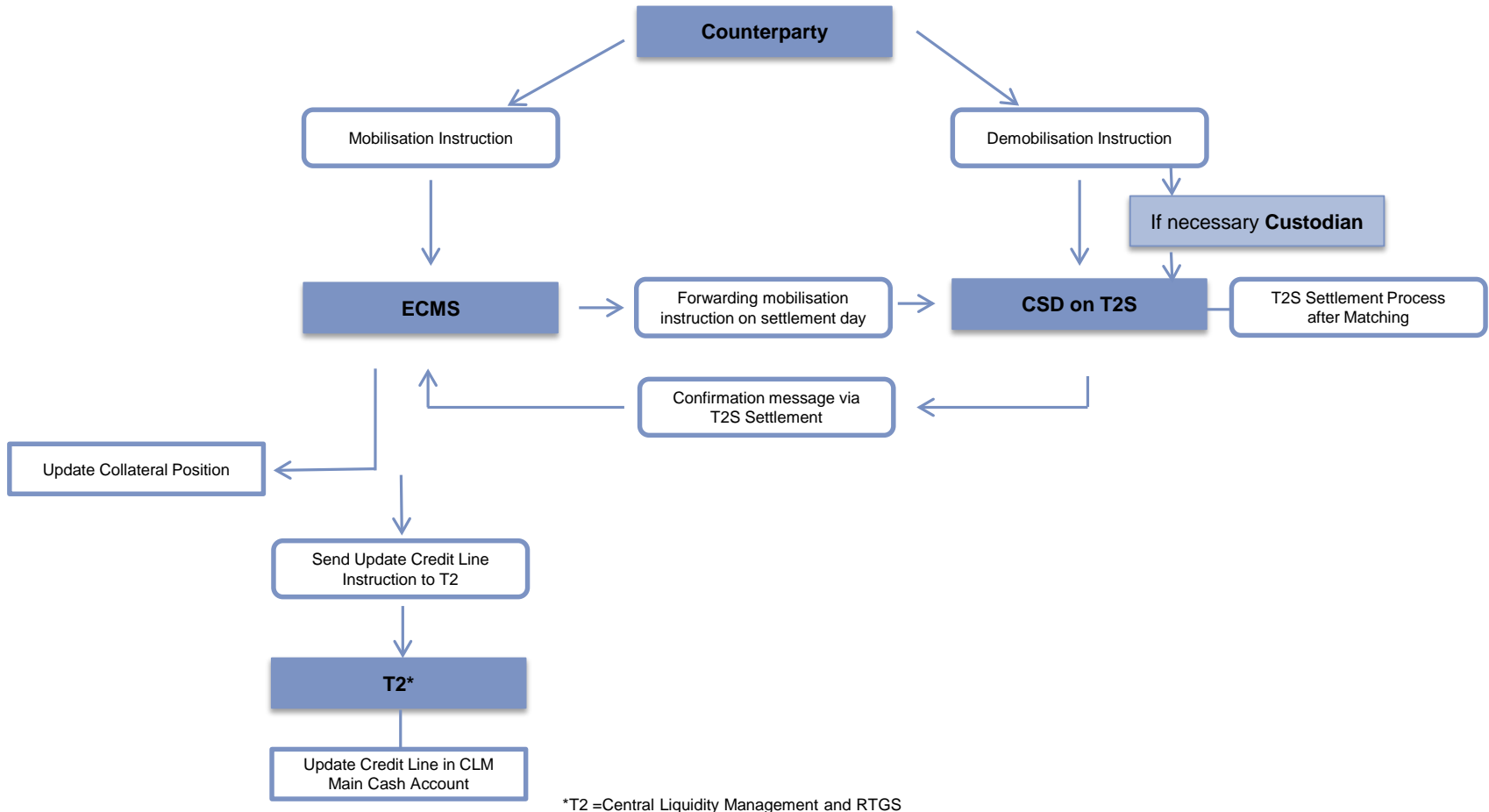
- **Counterparty asset accounts:** the number is determined by the central banks (NCBs) and the type of collateral mobilised.
- **Collateral pools:** Multi-pooling functionality, but only one pool must be used for the collateralisation of Eurosystem credit operations. The pool provides a comprehensive overview of the collateral and credit positions and the credit line.
- **Collateral pool projection:** Is available in U2A and provides an overview of the expected development which is based on latest information available in ECMS.

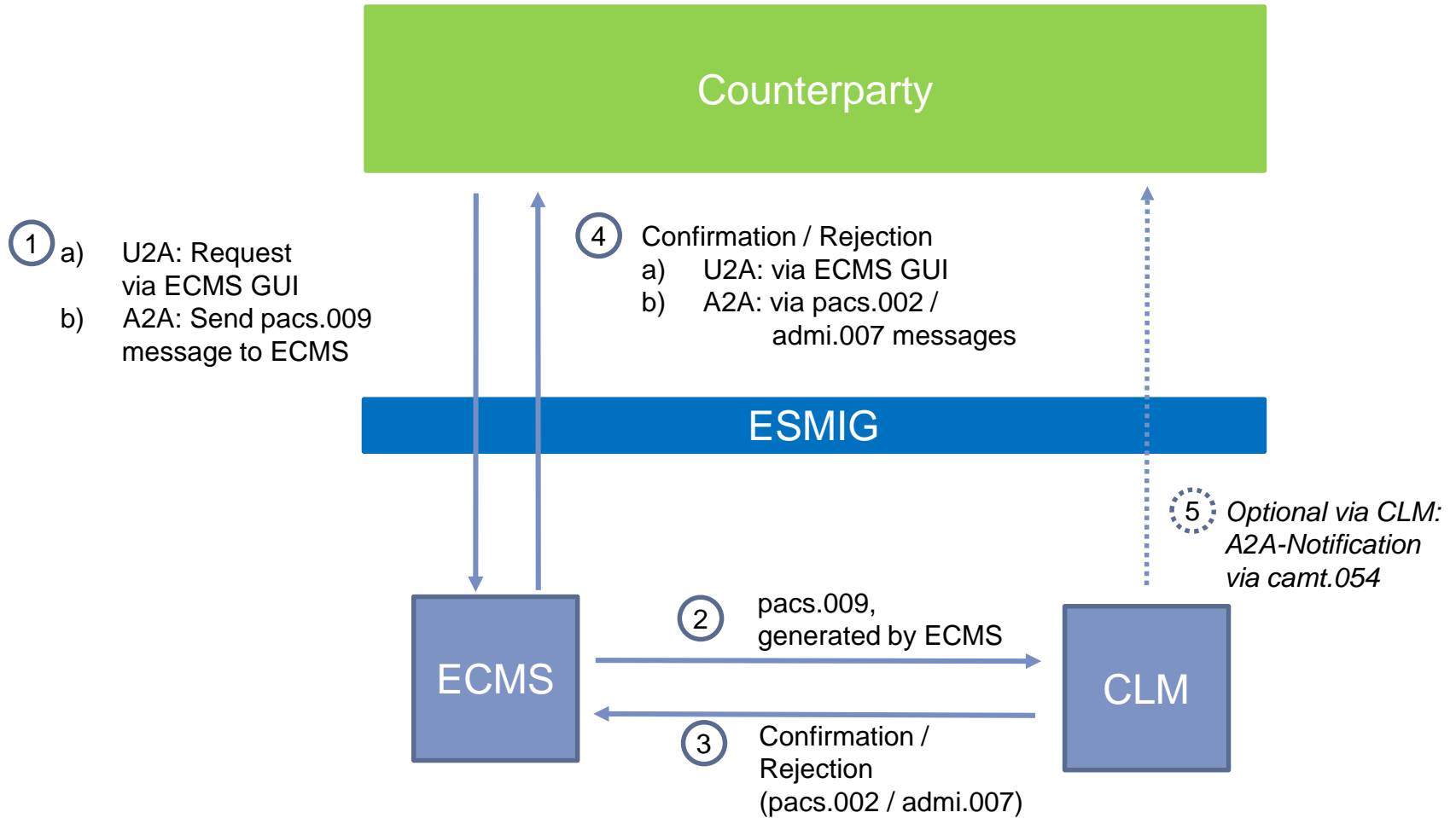
| Marketable Collateral Mobilisation                                                                | current | with ECMS |
|---------------------------------------------------------------------------------------------------|---------|-----------|
| <b>Domestic use:</b>                                                                              |         |           |
| Pledge of securities to the Bundesbank via CBF*                                                   | ✓       | ✓         |
| Third-party custody at a domestic central institution                                             | ✓       | ✗         |
| Pledge of global amounts via Triparty Agent (TPA)                                                 | ✓       | ✓         |
| <b>Cross-Border use:</b>                                                                          |         |           |
| Direct link between securities settlement systems                                                 | ✓       | ✓         |
| Indirect link between securities settlement systems                                               | ✓       | ✓         |
| Correspondent Central Banking Model (CCBM)<br>- direct (securities issued with CBF)<br>- via link | ✓       | ✓         |
| Pledge of global amounts via TPA:<br>- via link<br>- via CCBM                                     | ✓       | ✓         |

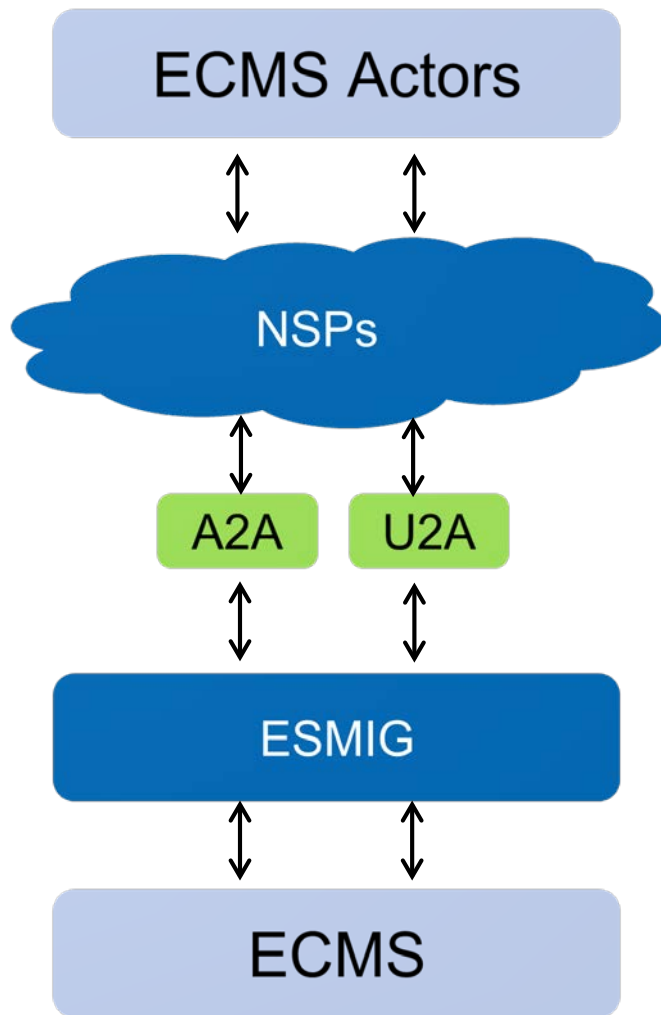
\* Clearstream Banking Frankfurt (CBF)

- **Freedom of choice** in the mobilisation of marketable assets; existing mobilisation channels remain unchanged.
- Mobilisation from accounts in CBF-Creation and Clearstream Banking Luxembourg (CBL) are still possible.
- Bundesbank acts as CCB (correspondent central bank) and HCB (home central bank): Credit institutions can mobilise collateral for all entities in Europe to the Bundesbank, but **asset transfers** are not possible. This requires their demobilisation and a new mobilisation of the securities.
- Only the **harmonised triparty model** will be used. Users of TPA services interact directly with the TPA and not with ECMS.
- Cross-border use of **non-marketable assets** in ECMS.









### Current Access:

- In U2A mode, communication takes place via the **Collateralmanagement Access Portal (CAP)** and in A2A mode via SWIFT / XML.

### Future Access to ECMS:

- Access via the **Eurosystem Single Market Infrastructure Gateway (ESMIG)**.
- ECMS participants can connect to ESMIG via **Network Service Providers (NSPs)** in U2A or A2A mode.
- The communication between ESMIG and ECMS and all market participants in A2A mode is based on the **ISO 20022 Standard**.

|                                   | A2A                                                                           | U2A                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Connection                        | <ul style="list-style-type: none"> <li>• SWIFT</li> <li>• SIA-COLT</li> </ul> | <ul style="list-style-type: none"> <li>• SWIFT</li> <li>• SIA-COLT</li> </ul> |
| Costs                             | Costs of the network service provider                                         |                                                                               |
| Implementation and testing effort | <b>Very high</b><br>(ISO 20022 messages)                                      | <b>Medium / rather low</b><br>(Certification)                                 |

- U2A access to all TARGET services via a shared ESMIG portal
- Services / components for which access rights have been assigned can be selected on the central **ESMIG landing page**:
  - Billing (BIL)
  - Business Day Management (BDM)
  - Central Liquidity Management (CLM)
  - Common Reference Data Management (CRDM)
  - Data Warehouse (DWH)
  - Enhanced Contingency Solution (ECONS II)
  - **Eurosystem Collateral Management System (ECMS)**
  - Real Time Gross Settlement (RTGS)
  - TARGET Instant Payment Settlement (TIPS)
  - TARGET2-Securities (T2S)



Choose a Service


TIPS       T2       T25

Choose an Application

CRDM

Data Migration Tool

TIPS

Choose a System User 

Search for user...

918299

993393

993399

998899

Submit

Source: ECB

### – Pool projection

Query of the expected level of the collateral pool in the future, available via **GUI**

- Is based on the latest available information (e.g. securities transactions still to be processed, new and due tender operations, etc.)
- Only available in **U2A mode**

### – ECMS Banking Groups

Groups of counterparties can be defined as „**ECMS Banking Group**“

- One counterparty is defined as manager of the **Banking Group**.
- Manager has access to a consolidated view of the collateral pool.
- Only available in **U2A mode**

- In principle, an NSP is required for the connection to ESMIG and access to ECMS.
- Institutions that use **Co-Management in T2 (Central Liquidity Management and RTGS\*)** do not need their own NSP to access T2.
- In addition, **other connection options** are likely to be available as alternatives to using your own NSP.
- There is the possibility for **ESMIG connection** and **access to ECMS via third parties**.

\*(RTGS - Real-Time Gross Settlement)



1. ECMS – an introduction
2. The functionalities of ECMS
- 3. Changes accompanying the introduction of ECMS**
4. Local particularities in future Collateral Management
5. Project timeline
6. Community Readiness Monitoring of the Eurosystem
7. Support by the Bundesbank

Agreement was reached in the following areas of harmonisation regarding the settlement procedures:

– Use of Triparty **(Single Triparty-Model)**



– Processing of **Corporate Actions**



– Collection of fees **(Billing)**



Implementation of the harmonised processes: **November 2023 with ECMS go-live**

More information: Single Collateral Rulebook for Europe (SCoRE)

[https://www.ecb.europa.eu/paym/intro/publications/pdf/ecb.AMI-SeCo\\_Collateral\\_Management\\_Harmonisation.pdf](https://www.ecb.europa.eu/paym/intro/publications/pdf/ecb.AMI-SeCo_Collateral_Management_Harmonisation.pdf)

With go-live of the ECMS, further changes are planned in the Eurosystem's collateral management:

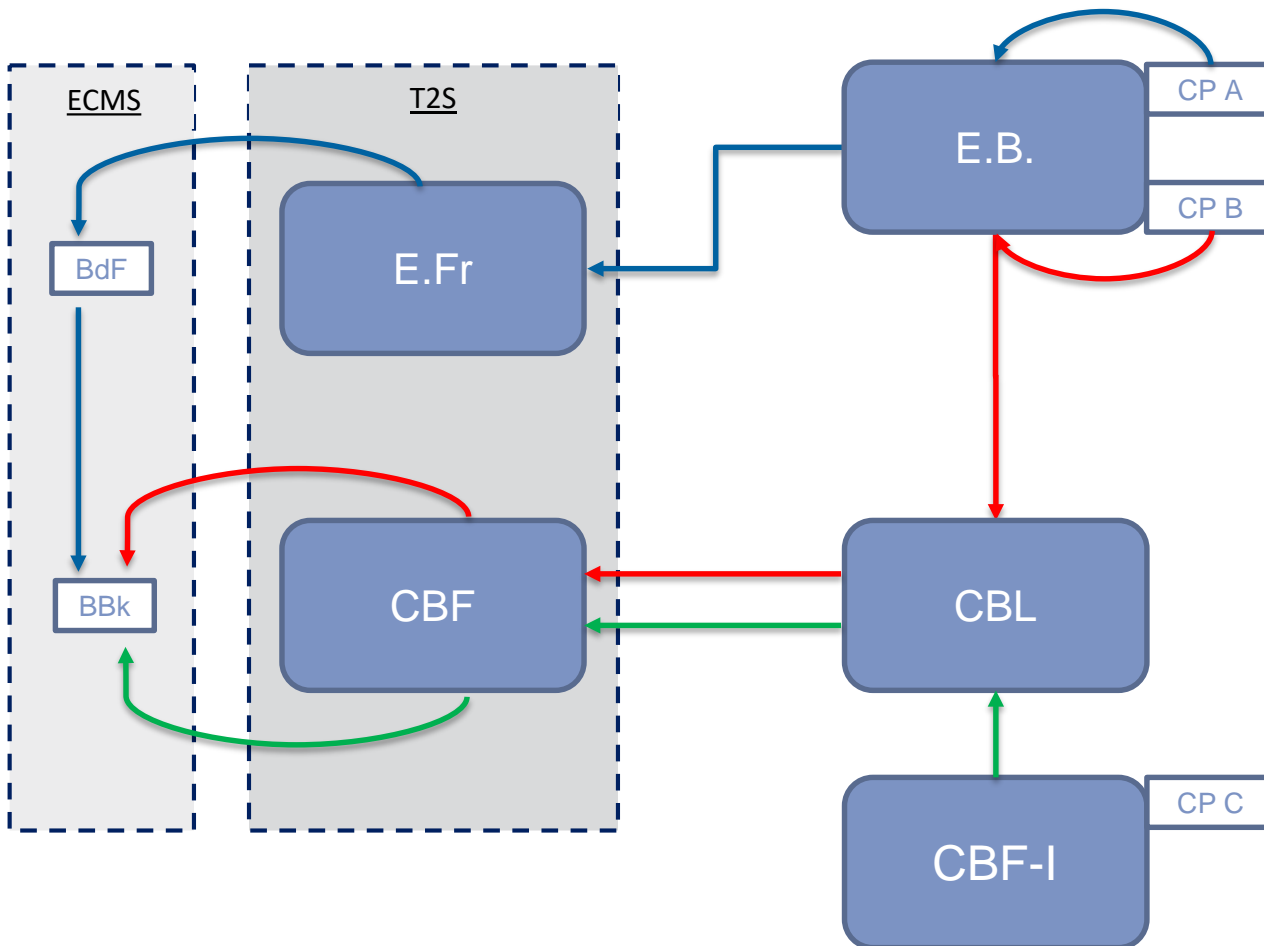
### – T2S settlement policy

Marketable collateral is only received in securities accounts at T2S CSDs:

- Affects Bundesbank accounts in CREATION system of Clearstream.
- Clearstream plans to make around 15,000 eligible Eurobonds available in T2S in the first quarter of 2021.
- Will not lead to a reduction in availability of eligible collateral.

### – Abolition of CCBM fees

- Fixed and variable fees of the Eurosystem for CCBM usage no longer apply with ECMS.
- Custody fees of the CSDs will still be passed on to counterparties in the future.



CP A is a monetary policy counterparty of Bundesbank and a participant in Euroclear Bank. CP A mobilises collateral from Euroclear Bank to the account of BDF at Euroclear France.

- Collateral is mobilised via CCBM

CP B is a monetary policy counterparty of Bundesbank and a participant in Euroclear Bank. CP B mobilises collateral from Euroclear Bank via CBL to the account of BBk in CBF.

- Collateral is mobilised via CSD link.

CP C is a monetary policy counterparty of Bundesbank and participant in CBF-I (CBF-Creation). CP C mobilises collateral from CBF-I to the account of the BBk in CBF (via CBL).

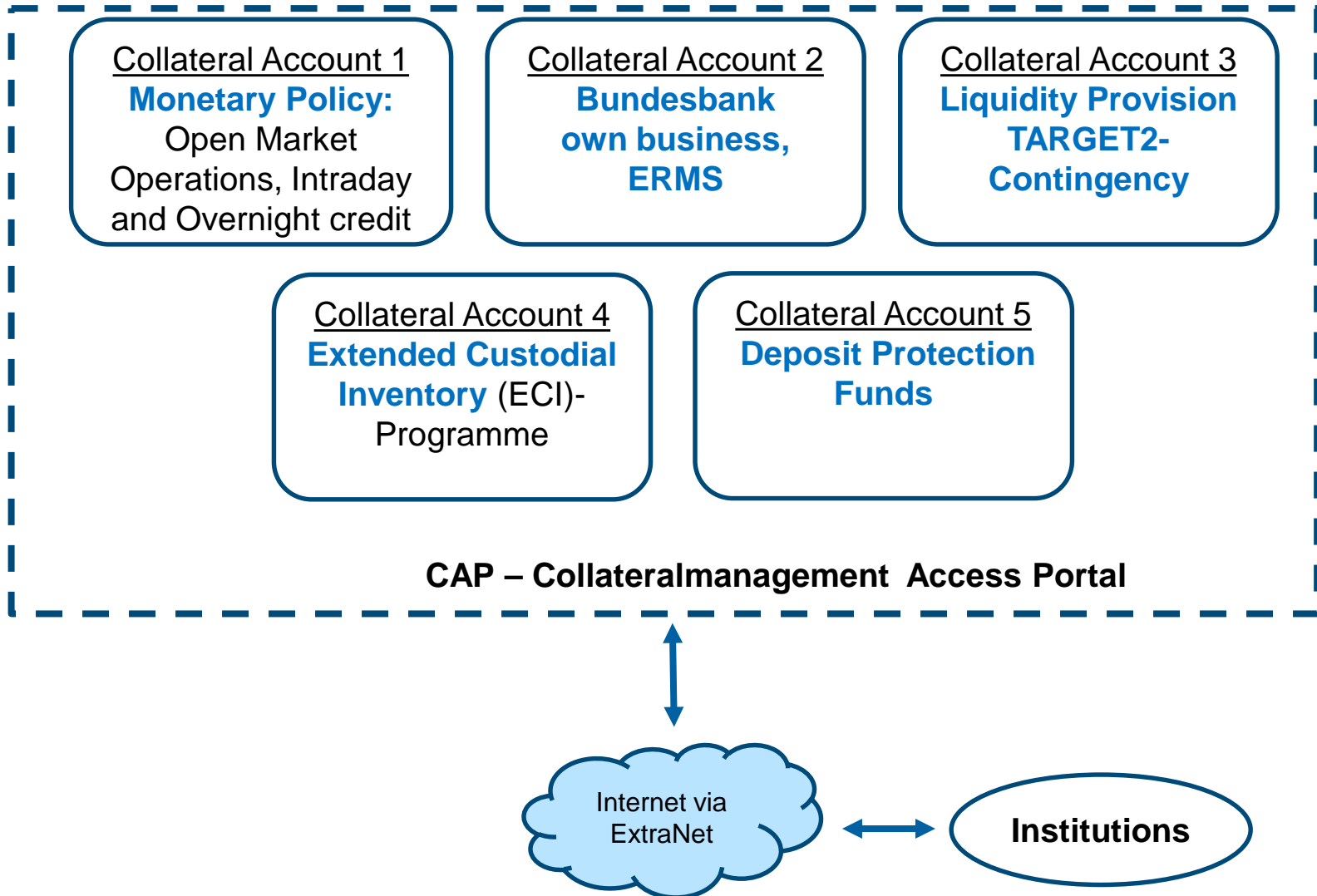
- Collateral is mobilised via CSD link.

### Settlement of Open Market Operations starts at 19:00:

- Current settlement in the morning (9:00) will be moved to **the beginning of the CLM business day (19:00)**.
- Also includes **netting** of expiring and new open market operations.

1. ECMS – an introduction
2. The functionalities of ECMS
3. Changes accompanying the introduction of ECMS
- 4. Local particularities in future Collateral Management**
5. Project timeline
6. Community Readiness Monitoring of the Eurosystem
7. Support by the Bundesbank

Currently: Access to all Collateral Accounts via CAP



After “go-live” of ECMS the following local procedures will remain unchanged:

– **Collateralmanagement Access Portal (CAP)**

Only for non-monetary collateral pools

– **Open Market Tender Operations System (OMTOS)**

National Bidding system for Open Market Operations via tender remains unchanged.

– Management of Credit Claims as Collateral:

- New system called **Mobilisation and Administration of Credit Claims (MACCs)** has replaced the old system “Kreditforderungen – Einreichung und Verwaltung” (KEV) in August 2020.
- National system MACCs will remain after the implementation of ECMS.
- Domestic use of credit claims via MACCs, cross-border use in ECMS.



# Eurosystem Collateral Management System Agenda

1. ECMS – an introduction
2. The functionalities of ECMS
3. Changes accompanying the introduction of ECMS
4. Local particularities in future Collateral Management
- 5. Project timeline**
6. Community Readiness Monitoring of the Eurosystem
7. Support by the Bundesbank

|                                       | 2018                                 |                                      |    |    | 2019 |    |    |    | 2020 |    |    |    | 2021                                 |    |    |    | 2022                                 |    |    |    | 2023 |    |    |    |
|---------------------------------------|--------------------------------------|--------------------------------------|----|----|------|----|----|----|------|----|----|----|--------------------------------------|----|----|----|--------------------------------------|----|----|----|------|----|----|----|
| Phase                                 | Q1                                   | Q2                                   | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1                                   | Q2 | Q3 | Q4 | Q1                                   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |
| <b>ECMS Overall realisation phase</b> | [Blue arrow from Q1 2018 to Q4 2023] |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    |                                      |    |    |    |      |    |    |    |
| Specification phase                   | [Blue arrow from Q1 2018 to Q3 2019] |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    |                                      |    |    |    |      |    |    |    |
| Development and internal testing      |                                      | [Blue arrow from Q2 2018 to Q3 2021] |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    |                                      |    |    |    |      |    |    |    |
| Acceptance testing                    |                                      |                                      |    |    |      |    |    |    |      |    |    |    | [Blue arrow from Q4 2021 to Q3 2022] |    |    |    |                                      |    |    |    |      |    |    |    |
| User test phase                       |                                      |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    | [Blue arrow from Q4 2022 to Q3 2023] |    |    |    |      |    |    |    |
| Implementation phase                  |                                      |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    | [Blue arrow from Q3 2023 to Q4 2023] |    |    |    |      |    |    |    |
| Go-live                               |                                      |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    | [Red diamond at Q4 2023]             |    |    |    |      |    |    |    |
| Stabilisation & closing               |                                      |                                      |    |    |      |    |    |    |      |    |    |    |                                      |    |    |    | [Blue arrow from Q4 2023 to Q4 2023] |    |    |    |      |    |    |    |

Source: inspired by ECB

- Development and internal testing until the end of the third quarter of 2021
- User test phase including test preparation starts in the fourth quarter of 2022

➤ Go-live as „**Big Bang**“ in **November 2023**

- **Staggered test activities** are intended: First the NCBs, then CSDs and TPAs, and finally the counterparties.
- Duration of the entire user test phase: 12 months **including central bank users**.
- **Further details** on the user tests are currently being developed and will be made available in time.
- Currently, counterparties are almost exclusively **U2A (CAP) users**:
  - Small test scope, especially connectivity tests and mobilisation
  - Certification by national NCBs
- Test effort for future **A2A customers**, especially CSDs and TPAs, is higher:
  - There will be extensive certification for the messages.
  - Harmonised ISO 20022 messages only.

- **"Big Bang"** migration of all central banks in the Eurosystem in November 2023:
  - Query of exact migration data takes place with a proposal by the Bundesbank.
  - Migration details are currently being developed and will be made available in time.
- NCBs reassign all existing stocks. **Storage locations (CSD accounts) remain unchanged.** Using ECMS, they are only managed by a new system.
- No outstanding transactions on migration weekend:
  - Mobilisations have to be completed by Friday, otherwise the execution takes place on the following Monday.
  - Probably no involvement of the individual counterparty. Only reconciliation is necessary, but can also take place on the following Monday.
- Essentially, migration is **an internal migration within the central banks** with small impact on the institutions. There are more extensive implications for CSDs and TPAs.

# Eurosystem Collateral Management System Agenda

1. ECMS – an introduction
2. The functionalities of ECMS
3. Changes accompanying the introduction of ECMS
4. Local particularities in future Collateral Management
5. Project timeline
- 6. Community Readiness Monitoring of the Eurosystem**
7. Support by the Bundesbank

- The Eurosystem has set up a monitoring system for compliance of counterparties with the project milestones (**Community Readiness Monitoring**) in order to ensure successful and timely commissioning in November 2023.
- Market participants are asked at regular intervals to answer a harmonised **questionnaire on the current project status** (**green, yellow, red**) and the fulfillment status of currently 19 milestones; Communication takes place using a survey tool (Artologik online tool).
- After each milestone, the Bundesbank issues a report on the consolidated status of the German market for the ECB; Counterparties are **also kept up to date** on the state of preparation of the market.
- It is important that you indicate potential risks and problems to the Bundesbank at an **early stage** in the event of difficulties.

On June 30th, 2020 we asked you for the first time about the following milestones:

- **PSE** - ECMS project set-up:  
Actors name **contact persons** for the ECMS project and set up a team.
- **IAD1** - start of the impact study:  
Actors begin with a **detailed analysis of the impact** on business operations and the technical requirements to adapt their IT systems and processes to the changed ECMS services. This also includes an impact study regarding the connection of your IT systems to ECMS.

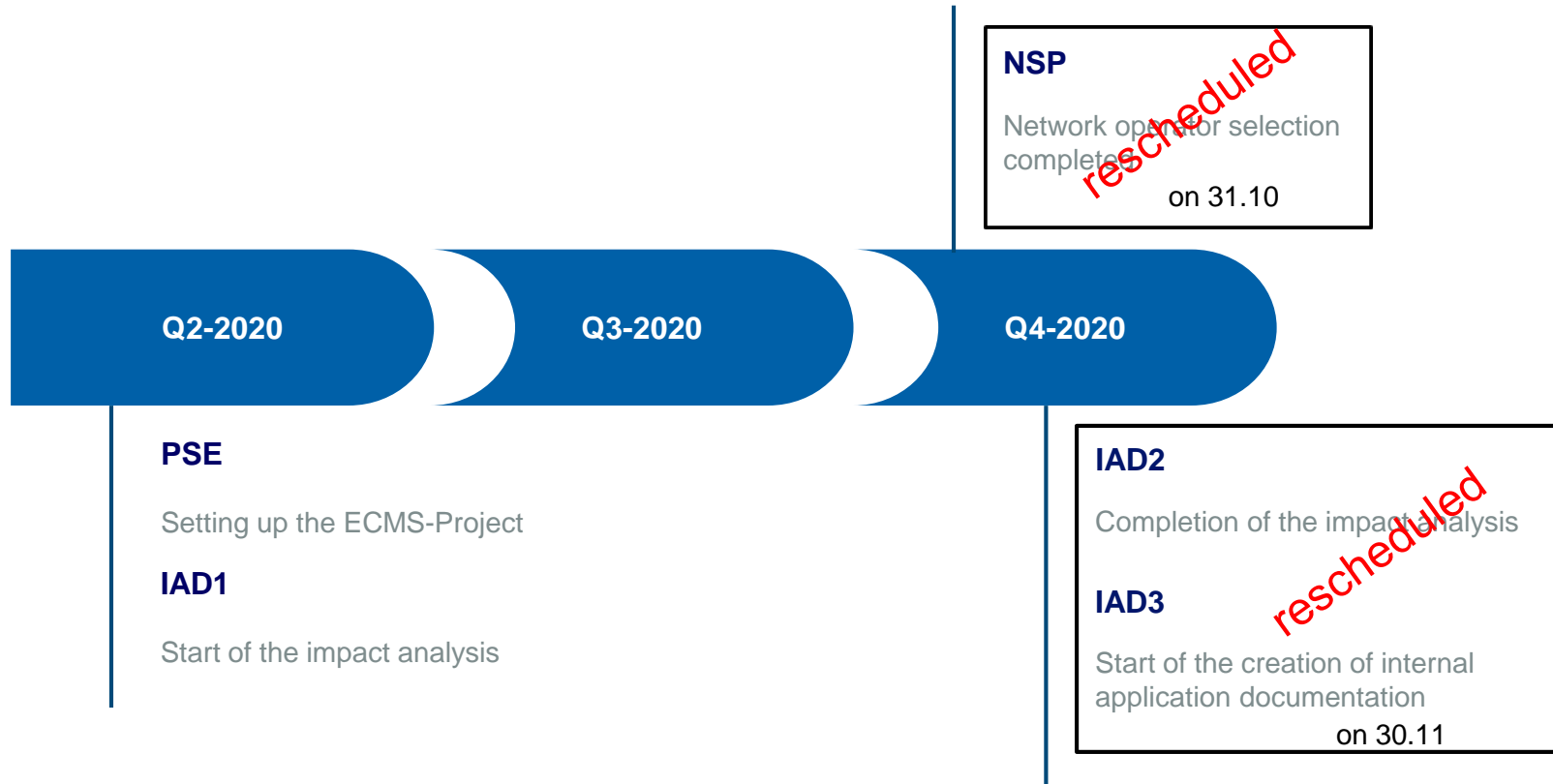
### Results of the first survey:

- By June 30th, 2020
  - 22% of the institutions had met the PSE milestone
  - 18% of the institutions had met the IAD1 milestone

→ Considerable progress can be expected by **the end of 2020**.



As of June 30th, 2020, 43% of the institutions reported “**green**” and 38% “**yellow**”





# Eurosystem Collateral Management System Agenda

1. ECMS – a Classification
2. The Functions of ECMS
3. Changes accompanying the introduction of ECMS
4. Local Particularities in Future Collateral Management
5. Project Timeline
6. Community Readiness Monitoring of the Eurosystem
7. **Support by the Bundesbank**

- Support during the introduction of ECMS:  
**Community Readiness Monitoring** and other information events. Training events are also planned.
- Information on the relevant ECMS functionalities:  
These will be made available in time in the relevant sections of the **User Detailed Functional Specifications (UDFS)** and the **Connectivity Guide** or as additional training material (e.g. ECMS **Business Description Document**).
- For questions please do not hesitate to contact us.



### Contents

|          |                                               |           |
|----------|-----------------------------------------------|-----------|
| <b>1</b> | <b>Overview</b>                               | <b>2</b>  |
| 1.1      | Introduction                                  | 2         |
| 1.2      | Purpose and structure of this document        | 3         |
| 1.3      | Features of the ECMS                          | 4         |
| <b>2</b> | <b>Interaction with the ECMS</b>              | <b>5</b>  |
| 2.1      | Technical connectivity                        | 5         |
| 2.2      | Roles and access rights                       | 5         |
| 2.3      | Operating hours                               | 6         |
| <b>3</b> | <b>Counterparties</b>                         | <b>8</b>  |
| 3.1      | Account and pool structure                    | 8         |
| 3.2      | Collateral management                         | 9         |
| 3.3      | Monetary policy operations                    | 15        |
| 3.4      | Counterparty pool                             | 18        |
| <b>4</b> | <b>Central Securities Depositories (CSDs)</b> | <b>22</b> |
| 4.1      | Corporate Action events                       | 22        |
| 4.2      | Sending of invoices                           | 23        |
| <b>5</b> | <b>Triparty agents (TPAs)</b>                 | <b>24</b> |
| 5.1      | Triparty collateral management                | 24        |
| 5.2      | Sending of invoices                           | 25        |
|          | <b>Annex: CA events processed by the ECMS</b> | <b>26</b> |
|          | <b>List of figures and tables</b>             | <b>28</b> |
|          | <b>List of abbreviations</b>                  | <b>29</b> |

- Contents 1

– On the **website of the Bundesbank**:

<https://www.bundesbank.de/de/aufgaben/unbarer-zahlungsverkehr/eurosystem-collateral-management-system/eurosystem-collateral-management-system-ecms--603142>

- Description of services (Business Description Document, (BDD)), Version 1.0 (German)
- Connectivity Guide
- ECMS FAQs
- Overview Important Milestones

– On the **website of the ECB**:

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

- Business Description Document Version 1.1 (English)
- ECMS info packs (English)

– ECMS ISO 20022 Messages in SWIFT MyStandards

- Information Event as interactive **WebEx to ECMS (German)** on
  - November 19<sup>th</sup> from 10:00 to 13:00.
  - November 23<sup>rd</sup> from 10:00 to 13:00.
- The implementation of **training events, workshops and possibly other information events** is planned.

**Thank you for your attention!**

If you have any questions, please do not hesitate to contact us.

E-Mail: [ECMS@bundesbank.de](mailto:ECMS@bundesbank.de)

Internet: [ECMS](#)