



TARGET2 USER GROUP MEETING 14 FEB 2019

Banque Centrale du Luxembourg



Introduction to the Eurosystem 'Target Consolidation' project

Banque Centrale du Luxembourg

AGENDA

1. The Target Consolidation whereabouts
 2. The new Target2 architecture
 3. The Eurosystem 'Target consolidation' project
 4. Participants readiness
 5. The Target consolidation UDFS
- + Presentation on TIPS ('Target Instant Payment Settlement')

1. Target Consolidation whereabouts

The «Vision 2020» projects

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)
<ul style="list-style-type: none">• November 2018• New market service giving commercial banks the means to offer instant payments to their clients across the Eurozone markets

TARGET Consolidation
<ul style="list-style-type: none">• November 2021• Replacement of the 'Target2' platform• New 'Real Time Gross Settlement' (RTGS) payment system• New tool to centralize the liquidity management (CLM) across the Target Services (T2S, TIPS and the new RTGS)

ECMS (Eurosystem Collateral Management System)
<ul style="list-style-type: none">• November 2022• New collateral management system for the Eurosystem Central Bank credit activities

2. New Target2 architecture

Guidelines (1/2)

Three considerations prevailed when deciding the replacement of the Target2 platform:

- I. The core of the new Target2 infrastructure shall consist in **two specialized systems**:
 - ✓ One for the settlement of large value payments (RTGS)
 - ✓ A second one to centralize the management of the participants' overall liquidity (CLM)
- II. The new solution shall be scalable. The **technical components** of the new platform, including the connectivity aspects, shall be **consolidated** among all the Eurosystem infrastructures whenever possible (*which explains why this project is also referred to as 'T2-T2S Consolidation'*).
- III. The new infrastructure will be a **fully fledged platform**. Its standard configuration shall be capable to support a series of services that used to be decentralized on the local Central Banks systems.

2. New Target2 architecture Guidelines (2/2)

These considerations led to the design of the new architecture:

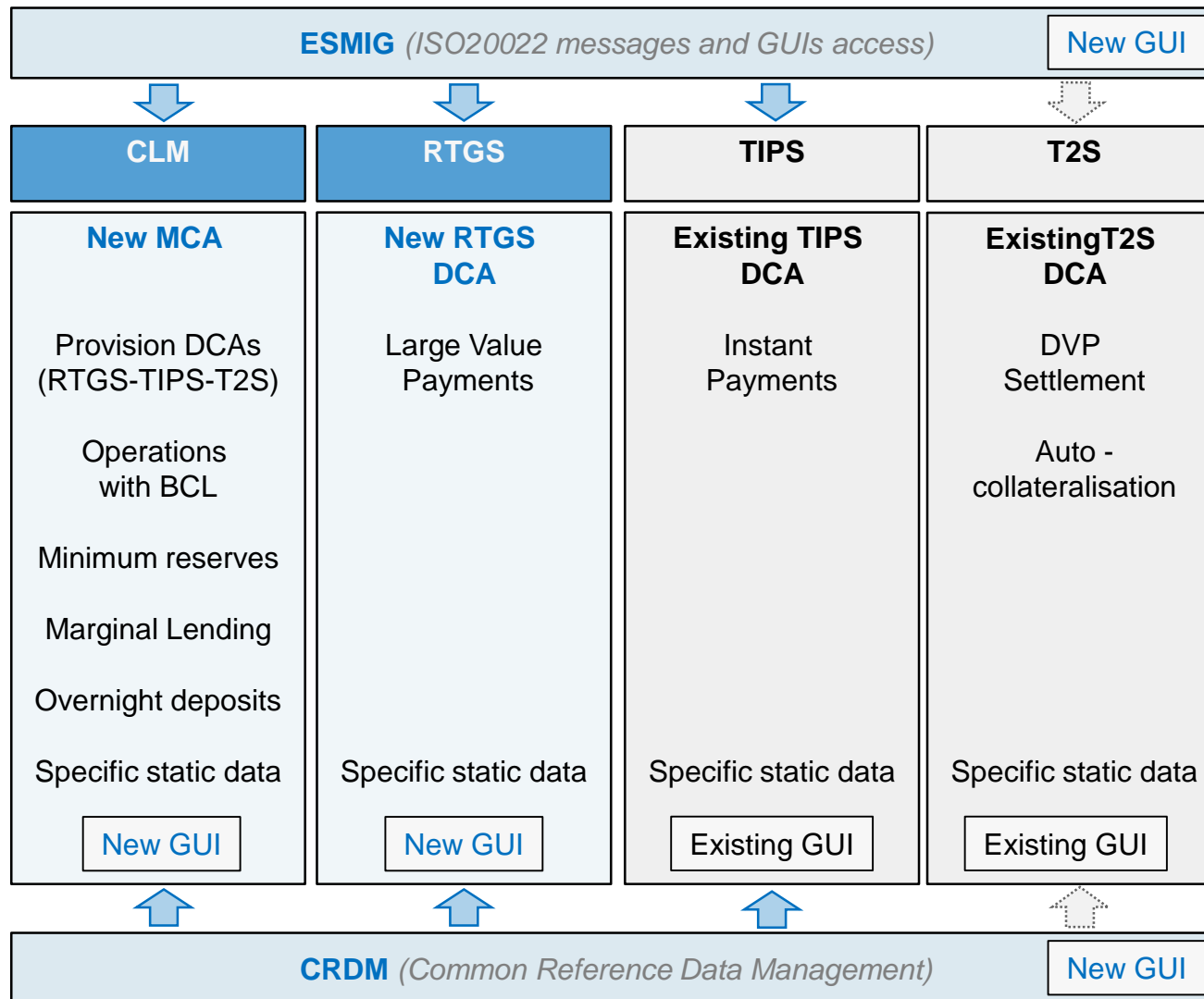
- ✓ A new Real Time Gross Settlement system (*new RTGS**) is exclusively used to settle large value payments.
- ✓ A new Central Liquidity Management system (*CLM**) complements the 'new' RTGS.
- ✓ A new Common Reference Data Management tool (*CRDM*) is used to manage a series of static data **
- ✓ These new systems are accessed via the Eurosystem Single Market Infrastructure Gateway, (*ESMIG*) which ultimately will be the entry point for all Eurosystem market infrastructures.

** In the future, the 'T2 service' denomination will refer to both 'new RTGS' and 'CLM'.*

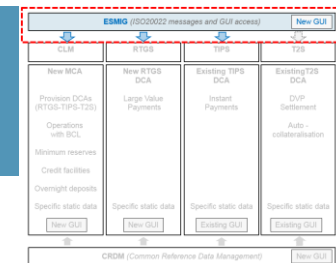
***Static data used by several infrastructures are managed on CRDM. Static data only used by one infrastructure are still managed in this infrastructure.*

2. New Target2 architecture

Overarching view



2. New Target2 architecture ESMIG



- ✓ The **Eurosystem Single Market Infrastructure Gateway** is a technical interface connecting the participants to any Target Service.
- ✓ The participants' connection to ESMIG are enabled by eligible* **Network Service Providers (NSP)**.
All RTGS or CLM users shall contact their intended NSP and secure an appropriate service level.
- ✓ ESMIG allows **two connections types**: **A2A** and **U2A**

Application to Application (A2A)

- Participants exchange structured messages with Target services
- **Exclusively ISO20022 standard (inbound and outbound)**
- Participants that do not adhere to the ISO20022 standard will not be able to use an A2A connection.

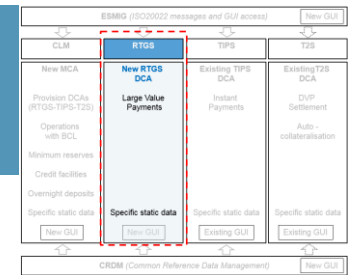
User to Application (U2A)

- **New ESMIG graphical user interface (GUI)** where users chose which Target Service GUI to open
- Suitable for **limited volumes** (does not offer the 'straight through processing' capabilities of an A2A connection).

* A tender procedure is currently ongoing at the Eurosystem level to select a series of NSP.

2. New Target2 architecture

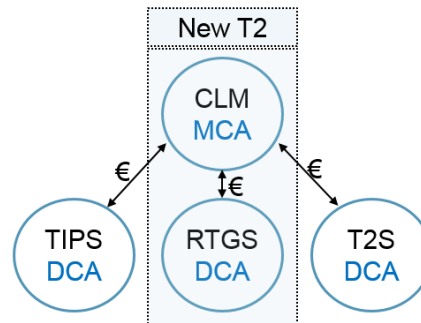
The 'new RTGS'



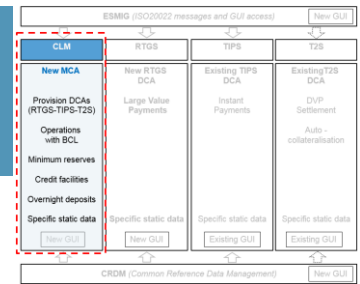
- ✓ The 'new RTGS' is the system for the settlement of large value payments.
- ✓ It offers **most features of the current Target2 'Single Shared Platform'**.
- ✓ It also introduces a series of **specific features**:
 - Settlement takes place on a new account, the RTGS Dedicated Cash Account (**RTGS DCA**).
 - The RTGS DCA is linked to a CLM Main Cash Account, its **primary source of funding**.
 - Participants will use a **new GUI** to maintain static data, instruct payments and run queries.
 - For 'Application to Application' activities, **ISO20022** is the new norm, replacing ISO15022.
 - There is a new **business day schedule** where participants can instruct payments earlier.
 - ASI procedures are adapted (specific Ancillary Systems activities).

2. New Target2 architecture CLM (1/2)

- ✓ Target Consolidation, at the contrary of the current infrastructure, segregates:
 - liquidity management activities, made on CLM (Central Liquidity Management) via a separate Main Cash Account (MCA)
 - large value payments activities, made on a RTGS DCA
- ✓ This model continues the logic prevailing to the design of T2S and TIPS, where DCAs are used for specific purposes.



- ✓ MCAs can be managed in both A2A (ISO20022) or U2A (new CLM Graphical User Interface) modes



2. New Target2 architecture

CLM (2/2)

CLM / MCA

Liquidity transfers

Participants can transfer cash between their MCA and DCAs (RTGS/T2S/TIPS), depending on their specific funding needs.

Cash rebalancing

Based on thresholds (floor/ceiling amounts) defined by a participant, CLM automatically rebalances liquidity between DCAs and MCAs.

Marginal Lending

When granted, this credit facility is mobilized on the participant MCA.

Monetary Policy operations

When subscribed, the cash flows stemming from the monetary policy operations go through MCAs.

Overnight Deposits

Participants willing to make an overnight deposit with the Central Bank will credit an ad-hoc MCA accordingly.

Central bank operations

e.g. bank notes withdrawals activities. The resulting cash flows involve the participant MCA and the Central Bank MCA.

Minimum Reserves

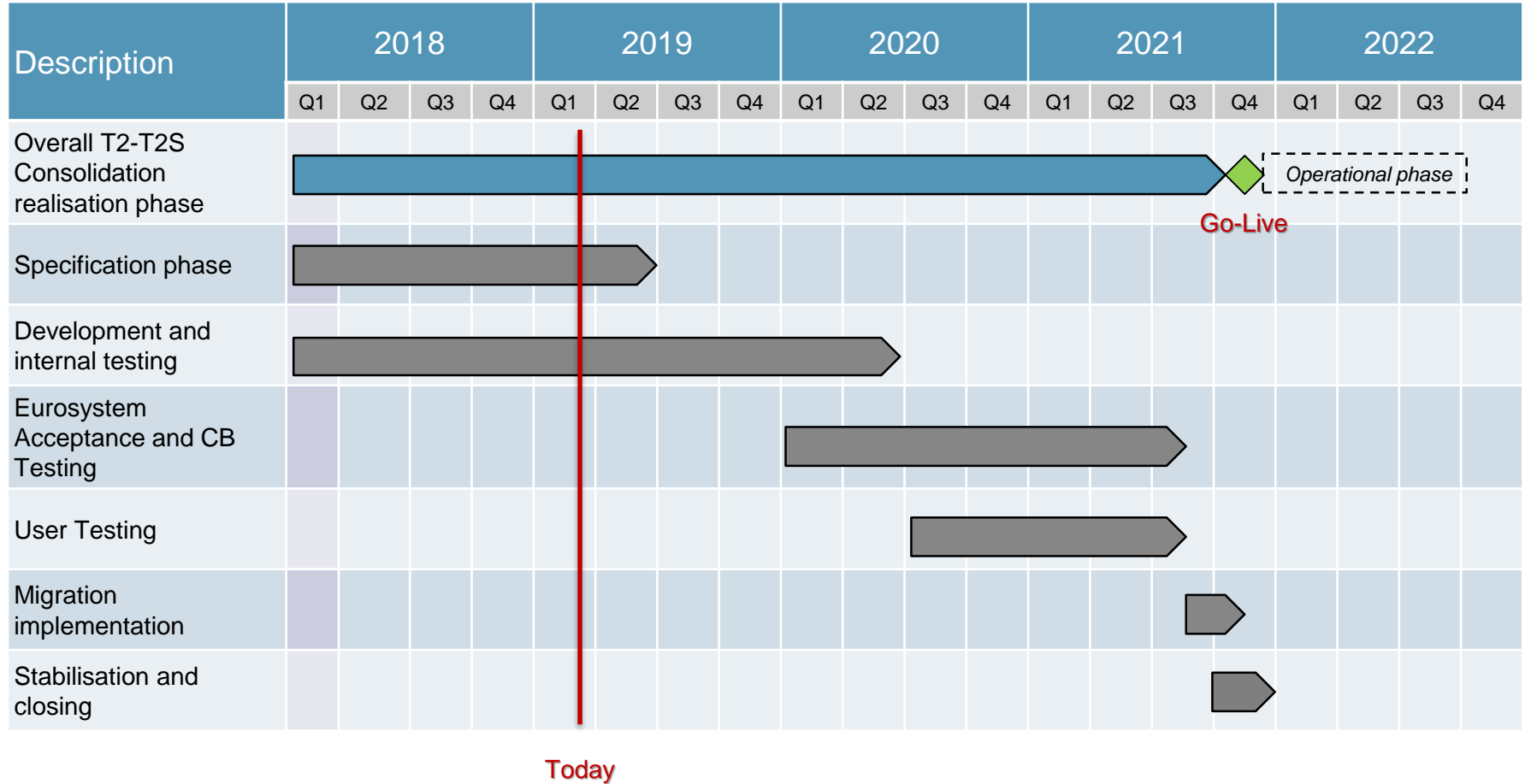
Any institution subject to mandatory minimum reserves shall provision its MCA accordingly.

These functionalities will be transferred from BCL's systems onto CLM.

As CLM supposes the usage of an MCA, **this project impacts the entire Luxembourg banking community and not only the current Target 2 participants.**

3. The Eurosystem 'target consolidation' project

Project phases



3. The Eurosystem 'target consolidation' project 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.

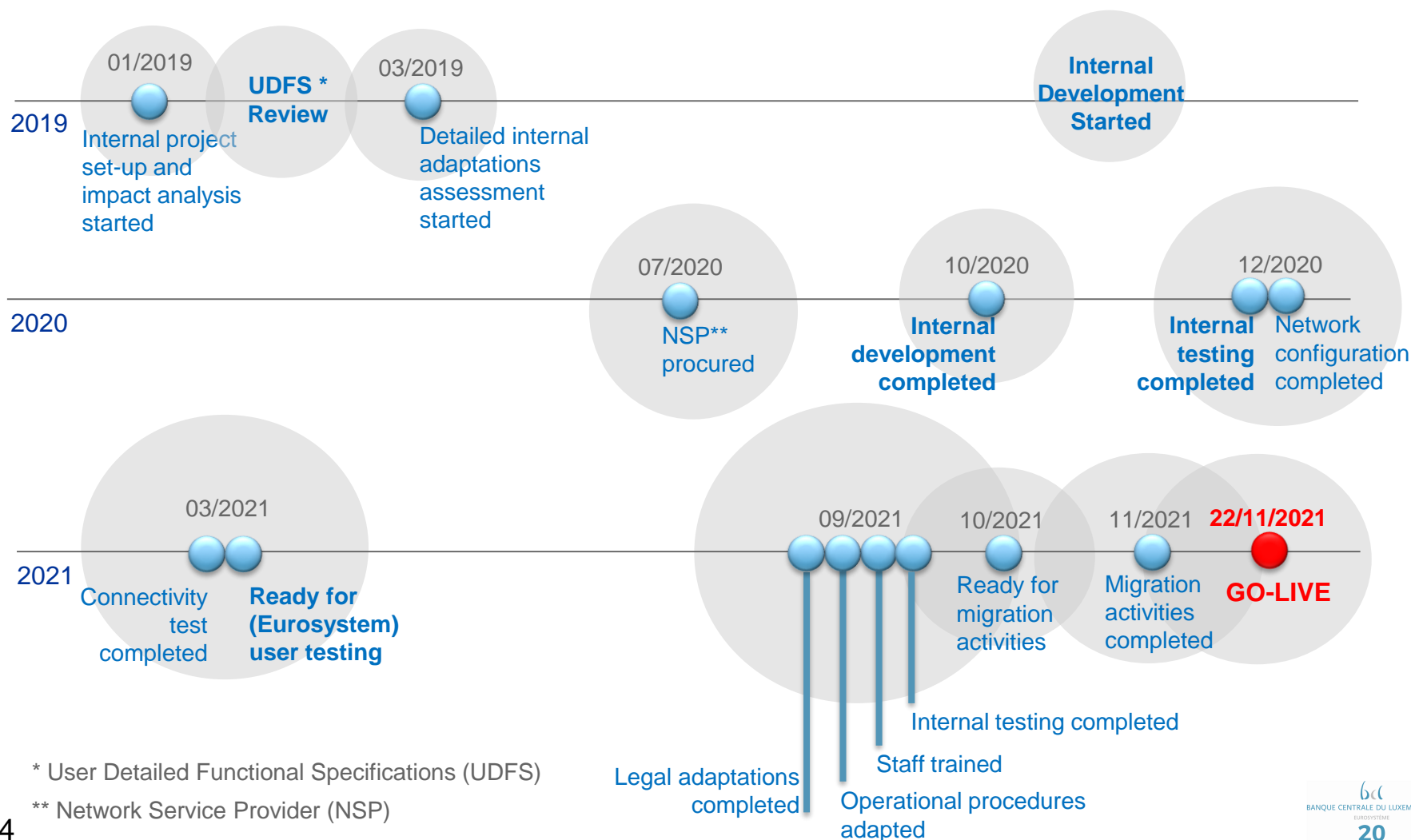
The **banking community readiness will therefore be a key factor for a successful transition.**

With this objective in view, the Eurosystem is currently designing a readiness framework, whereby the participants will be invited to report periodically their progresses for a series of pre-defined critical activities.

4. Participants Readiness

Key milestones

The BCL sent a letter to your Board (31st of January, 2019), requesting the nomination of a project manager to secure your readiness to fulfill the following milestones:



4. Participants Readiness

Detailed Key milestones

Participants shall prepare and implement a project plan covering at least the following activities:

	Milestones	Due date
1	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)	2019-01
2	Internal adaptation/assessment is started Participants start with the detailed business and technical impact assessment to adapt their IT systems/processes to the changing T2 services	2019-03
3	Network Service Providers procured Participants have procured and signed a contract with their selected Network Service Provider	2020-07
4	Completion of the software development for the required adaptation changes to T2 Participants finalised their internal developments to adapt their IT systems and processes to T2 and they are ready to start the internal testing.	2020-10
5	Completion of the internal testing before end-to-end market testing - Participants have completed their internal testing - Participants have configured their network connectivity	2020-12
6	Completion of network connectivity tests and ready to start the end-to-end market testing activities Participants have completed the connectivity testing on the testing environment and are ready to start the user testing	2021-03
7	Completion of (Eurosystem) user testing activities (including community and dress rehearsals for the migration) - 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	2021-09
8	Completion of contractual and legal adaptation Participants have completed the necessary contractual and legal adaptations	2021-09
9	Internal staff trained Participants have completed internal training for the testing and operational activities	2021-09
10	Completion of operational procedures adaptation Participants have completed the operational procedures adaptations	2021-09
11	Ready to start migration activities on production environment 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	2021-10-01
12	Completion of migration activities Participants have completed the pre-migration activities and are ready for the go-live	2021-11-05



4. Participants Readiness

Readiness report

Participants will be invited to report their readiness on a bi-monthly basis (occurrence might evolve).

The reporting will be an Excel Report or on a Web interface (EPSILON tool).

Overall readiness against all milestones [1-13]

Name of your institution Are you a T2 participant ? Do you have a BIC code ? Please indicate it, or alternatively write "no BIC" Do you use the SWIFT network ? (i.e. do you send SWIFT Messages?) Contact person email Date of reporting		Name <i>(Yes/No)</i> <i>xxxxxxxxxxxx</i> <i>(Yes/No)</i> <i>email</i> <i>dd/mm/yyyy</i>	
OVERALL STATUS DESCRIPTION Please indicate here your overall readiness status to migrate to the TARGET CONSOLIDATED platform by November 2021		OVERALL STATUS COLOR Green	

N°	MILESTONE	DUE DATE	COMMENTS	STATUS COLOR
1	T2-T2S Consolidation project set-up - you nominate a project manager and set-up the project (allocated resources, required budget and started the impact analysis)	15/02/2019	Please report your overall status here, And go to sheet "MILESTONE 1" to answer detailed questions	Green
2	Internal adaptation/assessment is started - you start with the detailed business and technical impact assessment to adapt their IT systems and processes to the changing services of T2.	29/03/2019		Green
3	Network Service Providers procured - you have procured and signed a contract with their selected Network Service Provider.	31/07/2020		Yellow
4	Completion of the software development for required adaptation changes to T2 - you have finalised their internal developments to adapt their IT systems and processes to T2 and they are ready to start the internal testing.	30/10/2020		Red
5	Completion of the internal testing before end-to-end market testing - you have completed their internal testing - you have configured their network connectivity	31/12/2020		Red
6	Completion of network connectivity tests and ready to start the end-to-end market testing activities - you have completed the connectivity testing on the testing environment and are ready to start the user testing	31/03/2021		Red
7	Completion of user testing activities (including community and dress rehearsals for the migration) - you have completed the user testing and have completed the certification tests required by the Eurosystem - you are ready to start the migration activities on the production environment	01/09/2021		Red
8	Completion of contractual and legal adaptation - you have completed the necessary contractual and legal adaptations	01/09/2021		Red
9	Internal staff trained - you have completed internal training for the testing and operational activities	01/09/2021		Red
10	Completion of operational procedures adaptation - you have completed the operational procedures adaptations	01/09/2021		Red
11	Ready to start migration activities on production environment - you are ready to start the migration activities and to setup the production environment (e.g. users, access rights, etc.) on the production environment according to the migration plan	01/10/2021		Red
12	Completion of migration activities - you have completed the pre-migration activities and are ready for the go-live	05/11/2021		Red
13	Go-live of T2 service (first business day)	22/11/2021		Red

Detailed reporting per milestone

TARGET Consolidation community readiness report				
Reporting central bank	LUCB			
Reporting period	Janv-19			
Name of critical participant				
Contact of project manager for critical participant	Name:			
	E-mail:			
	Telephone:			

Milestone 1	Step	Status	Date of (expected) completion	Comment
Milestone 1	Confidence level to go live in November 2021	Y	dd/mm/yyyy	Please comment on your confidence level
Milestone 1	Project started	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Project manager appointed	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Project scope defined	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Budget requested	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Budget allocated for 2019	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Resources planned	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Person days effort 2019			
Milestone 1	Person days effort 2020	1		
Milestone 1	Person days effort 2021	1		
Milestone 1	Resources allocated	No	dd/mm/yyyy	Please comment on why this step has not started
Milestone 1	Impact analysis started	No	dd/mm/yyyy	Please comment on why this step has not started

5. Target Consolidation UDFS

Participants review (1/3)

Investigation phase

User requirement document
(URD)

**Overarching document describing
the users requirements**

Consultation with the market
*(via the Target Consolidation
Contact Group members)*

- ended 30 June 2017
- 2800 comments received

Realisation phase

User Detailed Functional Specifications
(UDFS)

**Detailed functional description of the
features of the future service**

Consultation with the market
(all market participants)

Started: 21 January 2019
Ends: **05 April 2019**

5. Target Consolidation UDFS

Participants review (2/3)

Participants need to review the UDFS and align their internal infrastructure and operating models accordingly

- Two UDFS: one for RTGS and one for CLM (with the same structure)
- Documents structured in three parts:
 - ✓ *Functional description* - General features of the CLM/RTGS component
 - ✓ *UML Process description* - Dialogue with the CLM/RTGS actors
 - ✓ *Message description* and usage guidelines (MyStandards) - Catalogue of messages
- Content divided in 13 chapters

UDFS Structure
Part I - General features of RTGS
1 Overview of RTGS
2 Access to RTGS
3 Parties and accounts
4 Business day
5 Business and features description
6 Overview of used common components in RTGS
7 Contingency services
8 Operations and support
9 Additional information for CBs
Part II - Dialogue with the RTGS Account Holder
10 Processes with RTGS
11 Dialogues and processes
Part III - Catalogue of messages
12 Messages – introduction
13 Messages - general information

5. Target Consolidation UDFS

Participants review (3/3)

- ✓ We strongly suggest that you to take advantage of this opportunity to read and comment the 2 UDFS
- ✓ BCL Deadline: **31 March 2019**
- ✓ UDFS version 1.1 published for consultation on the ECB website (CLM + RTGS):
<https://www.ecb.europa.eu/paym/cons/html/index.en.html>
 - Cover note
 - UDFS CLM
 - UDFS RTGS
 - Structured template excel feedback forms for each UDFS
- ✓ In any case, you will have to read the UDFS during the project lifecycle (the sooner, the better) considering that you will need to adapt to upcoming changes:
 - New connectivity (ISO 20022 messages via ESMIG, plus new GUIs)
 - New infrastructure to interact with the BCL (CLM)
 - New account structure (MCA on CLM and DCA on RTGS)
- ✓ Send your comments to target.conso@bcl.lu
- ✓ Use the ECB template to include your comments (template for feedback - UDFS - CLM / RTGS):
<https://www.ecb.europa.eu/paym/cons/html/index.en.html>



TIPS

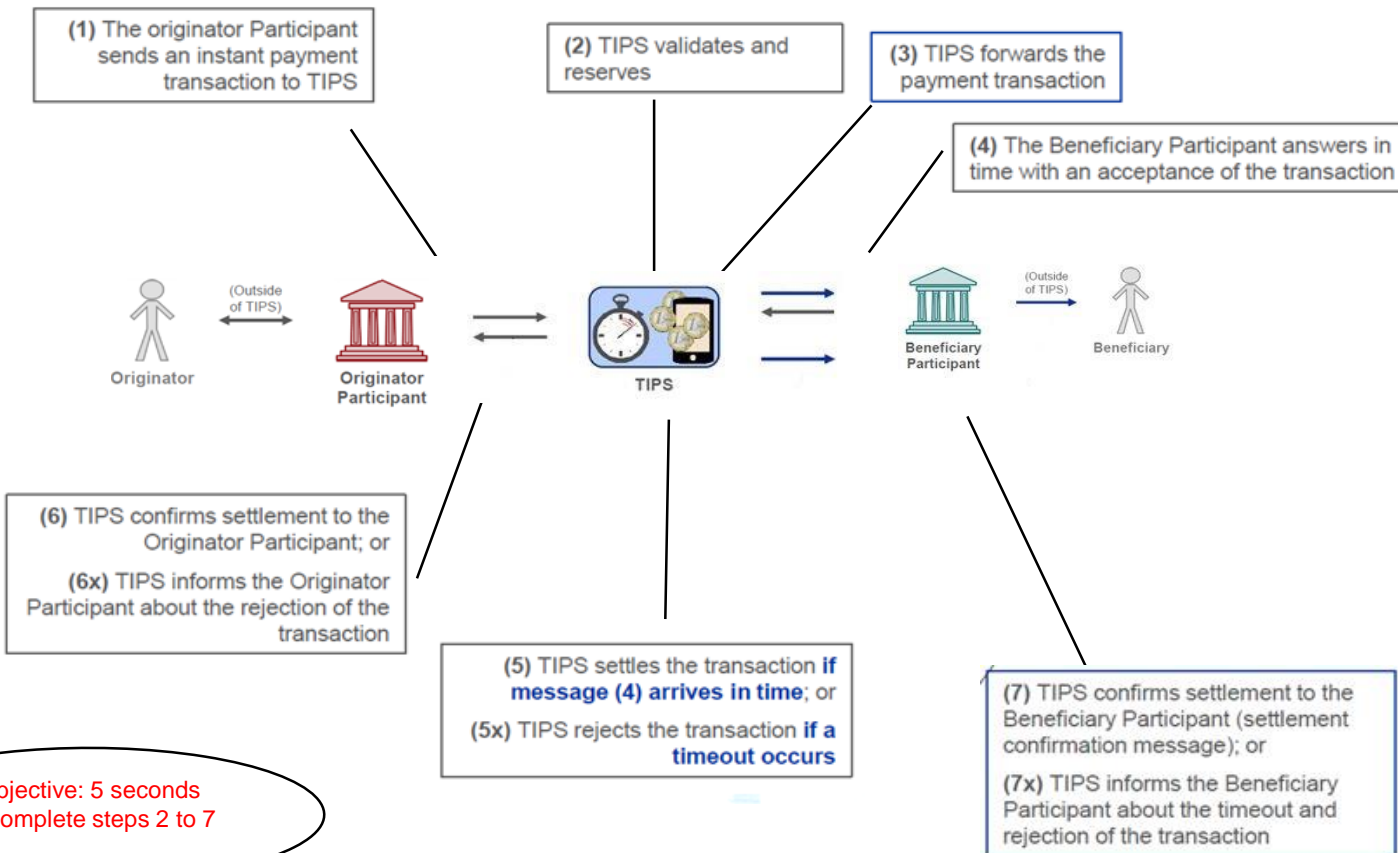
The Eurosystem's 'Target Instant Payment Settlement'

Banque Centrale du Luxembourg

Real-time settlement of instant payments in central bank money

- ✓ Live since 30/11/2018
- ✓ Operating 24/7/365
- ✓ Immediate settlement on TIPS DCA
- ✓ TIPS DCA part of the T2 perimeter
 - Liquidity transfers with T2 account during T2 hours
 - Counting in the minimum reserves (snapshot at the end of T2 day)
- ✓ Participants
 - Same participation criteria as TARGET
 - Indirect participation as Reachable Party via access to the TIPS DCA of a Participant
- ✓ Connectivity and messaging
 - ISO20022
 - Network Service Provider (NSP) agnostic (currently certified: SIANet and SWIFT)
 - Participants can send and receive (technical intermediation) via Instructing parties (e.g. ACH)
- ✓ Pricing
 - No entry fee, no fixed fee
 - 0.20 eurocent (€0.0020) per payment (at least the first two years of operation), FOC in 2019

The TIPS stakeholders and end-to-end flows



Objective: 5 seconds
to complete steps 2 to 7

TIPS

Broader context

A TIPS participation does not preclude interactions with Automated Clearing Houses (ACHs)

