



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Status update on T2S Strategic Evolution

AMI-SeCo Meeting



04 December 2024

DG-MIP/ Market Infrastructure Development

# Background: T2S Strategic Evolution Report

## September 2023

The MIB approved the T2S Strategic Evolution Report of the task force containing proposals to enhance the T2S design and plan to perform a number of Proof of Concepts to investigate potential benefits of architectural changes

## Q1-Q3 2024

As mandated in the Report, proposals for enhancements were submitted to the assessment of the T2S technical groups (see status on slide 3).

## 2024-2025

The 4CBs to perform a number of Proof of Concepts on APIs, microservices, and T2S GUI architecture (see status on slide 4)

# Status update: 22 Enhancement proposals

See Annex for details

- ❑ **2 measures** (to be) implemented via **minor change**:
  - ❑ (1.13) related to Real-Time Settlement (RTS) performance was implemented on Oct. 26
  - ❑ (1.15) related to Start-of-Day (SoD) performance improvements to be implemented
- ❑ **6 measures** translate into **Change Requests**:
  - ❑ (1.6) CR-837 with the aim to improve T2S performance with new SAC type for direct holding markets
  - ❑ (1.7) CR-835 to streamline business validations
  - ❑ (1.14), (1.16), (1.17), (1.18) for RTS and SoD performance improvements (2 CRs to be raised by 4CB)
- ❑ **1 measure** (1.3) to be implemented via **Last-Level Intervention** (streamline access rights mgmt. data)
- ❑ Other measures were either de-prioritised, or put on hold by the CRG

**Prioritised measures are expected to benefit T+1 and onboarding initiatives**

# Status update: *Proof of Concepts – APIs, microservices, GUI*

ID	PoC description	Start	End	Q1 2024			Q2 2024			Q3 2024			Q4 2024			Q1 2025			Q2 2025			Q3
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
All PoCs	PoC infrastructure delivery and configuration	01/01/2024	28/06/2024	██████████																		
2.5	[Architectural enhancements] Microservice PoC for penalty mechanism	01/07/2024	31/03/2025							██████████			██████████			██████████						
2.4	[GUI enhancement] Implementation of PoC	01/05/2024	31/12/2024				██████████			██████████			██████████									
2.6	[Architectural enhancements] Microservice PoC for SETT	01/07/2024	31/12/2024							██████████			██████████									
2.7	[Architectural enhancements] PoC on LCMM message processing network	01/07/2024	31/03/2025							██████████			██████████			██████████						
2.1	[Internal API] Implementation of PoC	01/01/2025	31/03/2025													██████████						
2.2	[External API] Use cases	01/10/2024	31/01/2025										██████████			██████████						
2.3	[External API] Implementation of PoC	03/02/2025	30/07/2025																██████████			
2.3.1	Pre-requisite: Infrastructure configuration	03/02/2025	30/04/2025													██████████						
2.3.2	Implementation of PoC	01/04/2025	30/07/2025																██████████			

Now

**Work is on track for the completion of the first PoCs end 2024, T2S governance will be informed about the results following internal demos**

## Next Steps: *External APIs*

Concerning the external APIs, a phased approach will be followed:

- ❑ **Call for interest to participate in the testing of a first external API use case**, a service that will allow T2S actors to consult the status of any T2S settlement instruction in the system. This will require specific infrastructure configuration and should follow an agreed timeline.
- ❑ **Collect input for additional external API use cases** from CSDs to extend the current PoC. A dedicated workshop will be organised to address the new use cases. These would be evaluated on 4CB side in terms of timeline and costs under the concept of “Proof of Value” in a second step.

**Coordination of the Call for Interest and dedicated workshop will be done via the CSD Steering Group**

# Annex 1 – Status update per functional enhancement proposal

ID	Description	CRG Ranking <sup>1</sup>	Agreed way forward	Status
1.1	[ALL] Stress tests for direct holding markets	n/a	Stress tests to find T2S volumetric limits	Under Eurosystem assessment
1.2	[ESMIG] Dedicated DB2 instance for ESMIG	n/a	Withdrawn due to high costs outweighing expected benefits	Withdrawn
1.3	[CRDM] Usage of Object Privilege Extension and maintenance of User Defined Roles	n/a	Removal of assigned roles and privileges successfully completed in UTEST Timeline for Production TBC	To be implemented as Last Level Intervention
1.4	[CRDM] Decommissioning of Liquidity Transfer Order Link Set and Liquidity Transfer Order Link	15	n/a	Deprioritised
1.5	[CRDM] Implementation of a new entity "Error Code" in the CRDM Rules and Parameters	13	n/a	Deprioritised
1.6	[CRDM] Review of the ARM model	n/a	New fast-track CR [T2S_0837_SYS]	CR awaiting authorisation
1.7	[LCMM] Reduction of business validations	7	New CR [T2S_0835_SYS]	CR awaiting authorisation
1.8	[SETT] NTS improvements: removal of C2S4 and C2SY (option 1)	n/a	On hold pending review for T + 1	On hold
1.9	[SETT] NTS improvements: merging of securities sequences (option 2)	n/a	On hold pending review for T + 1	On hold
1.10	[SETT] NTS improvements: merging of settlement cycles (option 3)	n/a	On hold pending review for T + 1	On hold

<sup>1</sup>By default, Excel RANK formula skips the next number if there is a tie

# Annex 1 – Status update per functional enhancement proposal

ID	Description	CRG Ranking <sup>1</sup>	Agreed way forward	Status
1.11	[SETT] Improvement of Auto-collateralisation during RTS	8	n/a	Deprioritised
1.12	[SETT] RTS improvements: partial settlement – messaging	1	On hold pending review of partial settlement improvements (T+1)	On hold
1.13	[SETT] RTS improvements: partial settlement – CPU	4	Minor Change tracked via PBI-233943	Implemented (26 October)
1.14	[SETT] RTS improvements: optimisation process	5	New CR to be raised by 4CB	CR process to be initiated.
1.15	[SETT] SoD improvements	1	Minor Change tracked via PBI (to be raised)	Ongoing implementation.
1.16	[LCMM/SETT interface] Internal messages	11	New CR to be raised by 4CB	CR process to be initiated (same CR for 1.16, 1.17 and 1.18)
1.17	[LCMM/SETT interface] Updates during RTS	3		
1.18	[LCMM/SETT interface] SoD revalidation of D+N instructions	5		
1.19	[CRDM/SETT interface] CRDM and SETT consistency	10	n/a	Deprioritised
1.20	[CRDM/SETT interface] IR reporting	14	n/a	Deprioritised
1.21	[CRDM/SETT interface] Calendar harmonisation	12	n/a	Deprioritised
1.22	[CRDM/SETT interface] Auto-collateralisation consistency	8	n/a	Deprioritised