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Presentation of the work on T2S strategic evolution

**Ami-SeCo meeting,
8 December 2023**

DG-MIP/MID

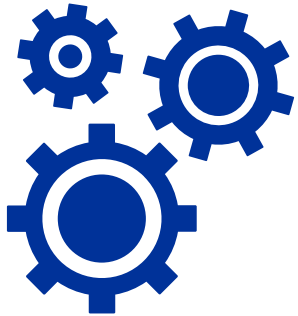


Introduction

- In February 2022, the MIB decided on the setup of a Eurosystem **task force** to support the **strategic evolution of T2S**
- The task force was mandated to **explore** possible **changes and enhancements** to T2S to continue delivering core benefits to the European financial industry over a horizon of **five to ten years**
- In September 2023, the task force shared the **conclusions** of its analysis **in a report**, including the **proposed measures** and **high-level roadmap**, which were **endorsed by the MIB** and subsequently presented to the **CSG** in November
- The aim of this **presentation** is to provide a **summary** of the report and its conclusions

Why the need for a strategic evolution of T2S?

- T2S design was established 15 years ago and the platform operates since 2015 in a changing regulatory, business and technological environment
- Existing governance arrangements focus on incremental changes to design / infrastructure



A strategic review enables to ...

- Respond to evolving market needs in terms of volumetric capacity and their specificities such as e.g. end-investor markets;
- Identify current complexities in the T2S design /architecture with the aim to improve the resilience, operability and usability of the T2S platform;
- Assess potential benefits of new alternative technological changes with the same objectives, also managing IT obsolescence;
- Identify upcoming wider securities market changes (e.g. regulation, new technologies,...) in order to ensure T2S will remain fit for purpose in the longer term.

How did the task force perform its analysis?

Eurosystem internal analysis

Proposals brought by 4CB experts and discussed with the task force



Market views

- Interviews conducted with key industry players
- Input on specific topics (e.g. API)

Market views



T2S is a pillar of European market infrastructures

A strategic reflection is warranted to leverage its benefits and ensure it remains suitable for future business needs



Integration of Distributed Ledger Technology is expected to be very gradual

The T2S integrated settlement model is deemed operationally robust and efficient



Application Programming Interface (API) could be leveraged

It would provide additional communication channels and integration opportunities for T2S actors, but its scope and business case need careful evaluation



T+1 for the European market is expected to be a focus of the industry

No major adaptations to T2S are anticipated, apart from possible adjustments to the settlement schedule. The Ami-SeCo will be in the lead for the dialogue and organisation of the work with T2S stakeholders



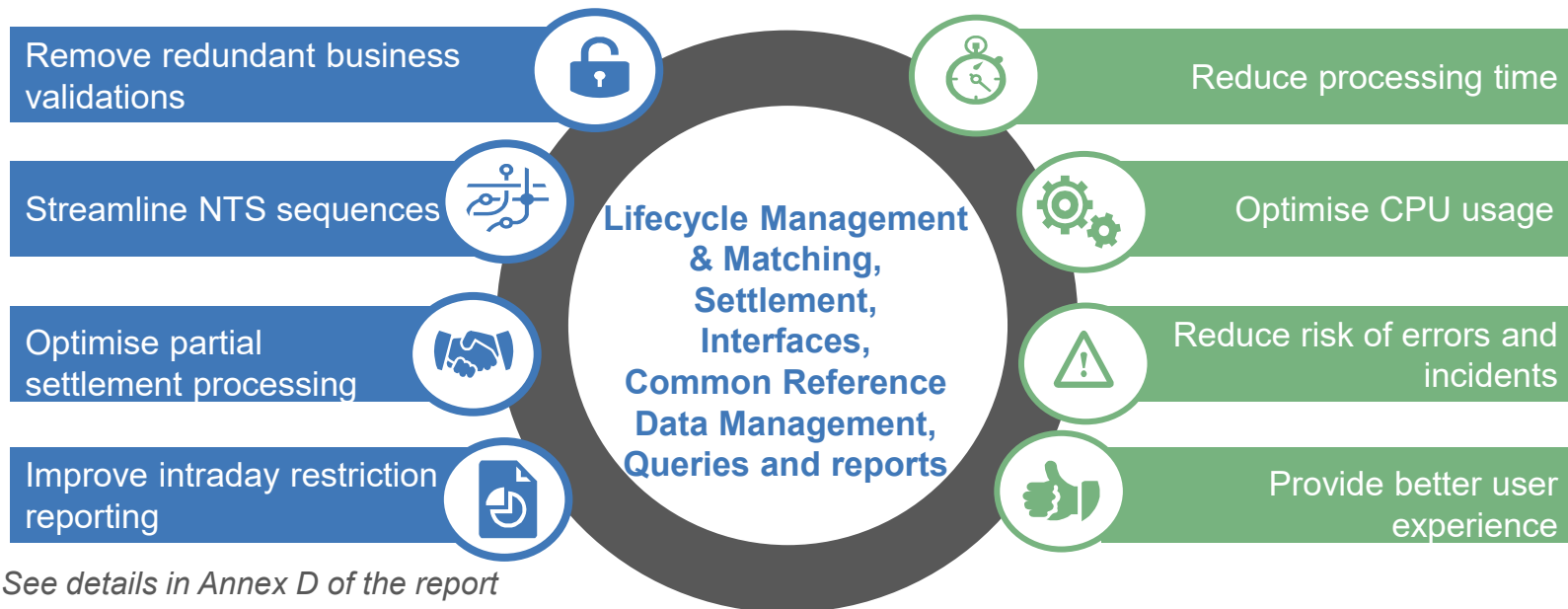
Uptake of cross-CSD settlement and settlement efficiency remain a concern

The Eurosystem will facilitate necessary changes in T2S and work towards removing regulatory and market practice barriers to cross-CSD settlement activity

Task Force Proposals (1/2)

Functional enhancements

22 proposals aiming at simplifying T2S design, improve performance, and operational resilience



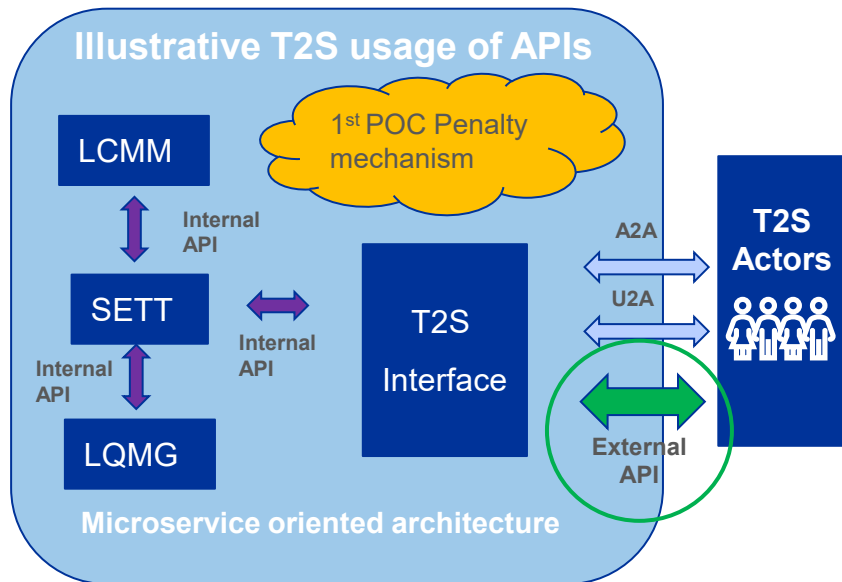
See details in Annex D of the report

Proposals will be submitted to T2S stakeholders and follow the existing change management process, to be complemented by stress test campaign

Task Force Proposals (2/2)

Exploring alternative technologies

A phased approach based on the implementation of Proof of Concepts (POC) for APIs, microservices and new T2S GUI architecture



- External APIs would offer an additional communication channel for T2S actors. The T2S governance will be leveraged to identify a possible use case.
- Internal APIs would improve communication between T2S modules
- Microservices, as an architectural approach, would enhance modularity and scalability of T2S software, also relying on modern distributed architecture
- Porting the T2S GUI architecture to a new technical framework (common components) is expected to bring performance improvements
- Initial POC for internal API and microservices to cover T2S penalty mechanism acquisition of daily prices and ISINs

Timeline / Next Steps - POC

ID	POC description	Start	End	Q1 24			Q2 24			Q3 24			Q4 24			Q1 25			Q2 25		Q3 25	
				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	[Dark Blue Bar]																		
2.5	[Architectural enhancements] Microservice PoC for penalty mechanism	01/07/2024	31/03/2025	[Dark Blue Bar]																		
2.4	[GUI enhancement] Implementation of PoC	01/05/2024	31/12/2024	[Dark Blue Bar]																		
2.6	[Architectural enhancements] Microservice PoC for SETT	01/07/2024	31/12/2024	[Dark Blue Bar]																		
2.7	[Architectural enhancements] PoC on LCMM message processing network	01/07/2024	31/03/2025	[Dark Blue Bar]																		
2.1	[Internal API] Implementation of PoC	01/01/2025	31/03/2025	[Dark Blue Bar]																		
2.2	[External API] Use cases	01/10/2024	31/01/2025	[Dark Blue Bar]																		
2.3	[External API] Implementation of PoC	03/02/2025	30/07/2025	[Dark Blue Bar]																		
2.3.1	Prerequisite: Infrastructure configuration	03/02/2025	30/04/2025	[Light Blue Bar]																		
2.3.2	Implementation of PoC	01/04/2025	30/07/2025	[Light Blue Bar]																		