



EUROPEAN CENTRAL BANK

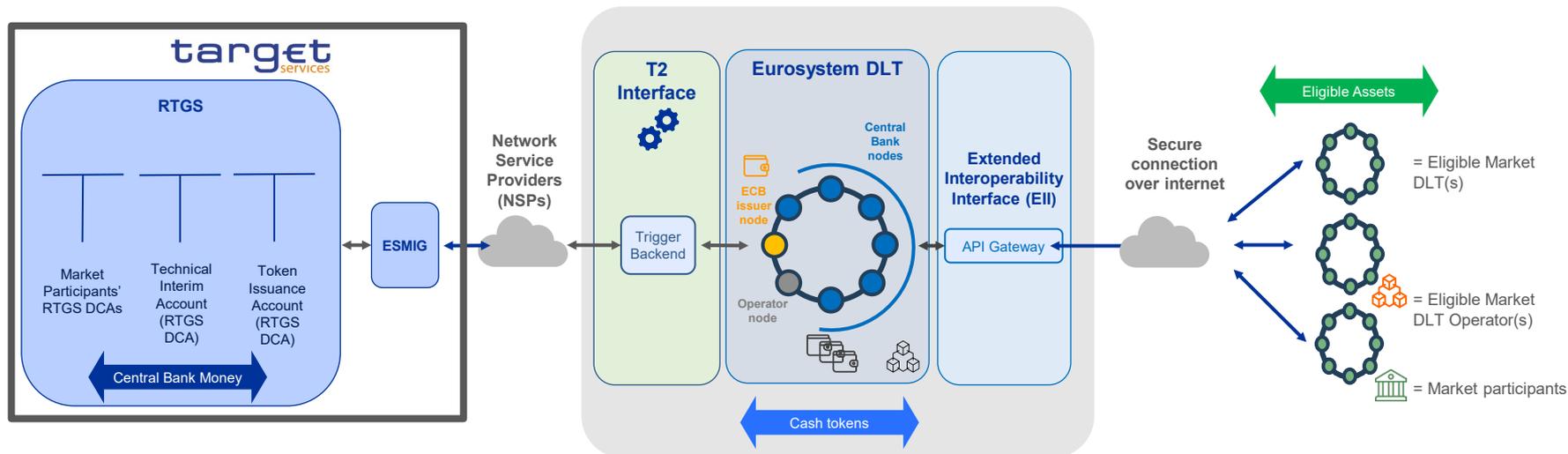
EUROSYSTEM

Insights on technical, functional and operational aspects of Pontes Initial Launch



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Pontes Initial Launch – Architecture overview



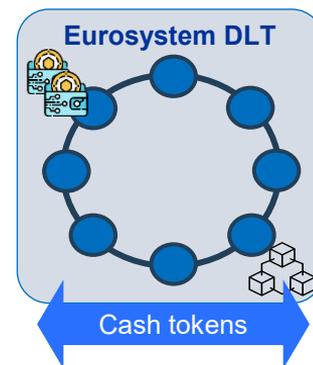
Pontes Initial Launch – Model description



Eurosystem DLT

The Eurosystem DLT will manage the **cash-leg of Distributed Ledger Technology (DLT)-based transactions**

- ❑ **Permissioned DLT-based platform** with Central Bank nodes
- ❑ (intra-day only) **cash tokens** on Eurosystem DLT
- ❑ Two types of **wallet**:
 - 1) **Dedicated Cash Wallets (DCWs)**
→ managed by the market participants
 - 2) **Token Issuance Wallet**
→ managed by the ECB (total amount of cash tokens)



Pontes Initial Launch – Model description



Dual settlement model

The solution will support **dual settlement model** as defined below

Settlement in tokenised form

- 1 Funding of Dedicated Cash Wallet(s)
- 2 **Settlement with cash tokens on the Eurosystem DLT**
- 3 Defunding of Dedicated Cash Wallet(s)

Direct settlement in T2 RTGS

**Settlement in T2 RTGS
Dedicated Cash Accounts (DCAs)
triggered via the Eurosystem DLT**

Pontes Initial Launch – Model description



Settlement finality

The solution will support **final CeBM settlement in T2 RTGS**

- ❑ As regards the **euro cash leg**, settlement of the euro CeBM related financial transactions using the Pontes Initial Launch will occur in T2 RTGS
 - ❑ With cash tokens
 - When a defunding is requested by the market participants or
 - Automatically at the end of business day
 - ❑ With direct settlement in T2
- ❑ The settlement finality of the **asset leg** will be dependent on the rules applicable to the market DLT operator

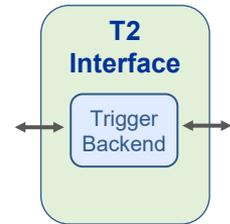
Pontes Initial Launch – Model description



End-to-end automation

The solution will enable end-to-end **automated processing of transactions**, relying on manual operations only in case of contingency

- ❑ The **T2 interface** will support automated processing using existing functionalities of T2
- ❑ **Minimal configuration (one-off) in CRDM required**
(i.e. direct debit mandate configuration)



Pontes Initial Launch – Model description



Reliable interoperability mechanism for all-or-none settlement

The solution will rely on the **Hash-Link protocol** for the use cases requiring *all-or-none* settlement

- ❑ Clearly defined **delineation** of responsibilities between the **Eurosystem** and **market DLT operators** will be provided as part of the project documentation
- ❑ **No specific technical requirements** for the market DLT platforms, except for the capability to **conditionally lock an asset transfer** to the provisioning of a secret key. This capability acts as an **escrow for the asset** which is released in favor of either the seller or the buyer involved in the transaction

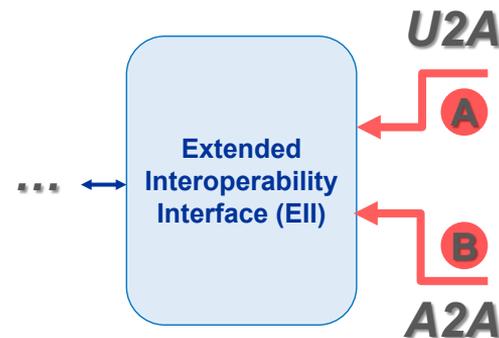
Pontes Initial Launch – Model description



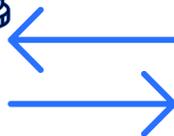
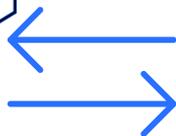
Pontes Initial Launch connectivity

The **Extended Interoperability Interface (EII)** will be the entry point of the Pontes Initial Launch with secure connection over internet:

- ❑ **User-to-Application (U2A)**
→ Graphical User Interface (GUI)
- ❑ **Application-to-Application (A2A)**
→ Application Programming Interfaces (APIs)



Pontes Initial Launch – Use cases



Delivery-versus-Payment (DvP)

- Primary market transactions
- Secondary market transactions...

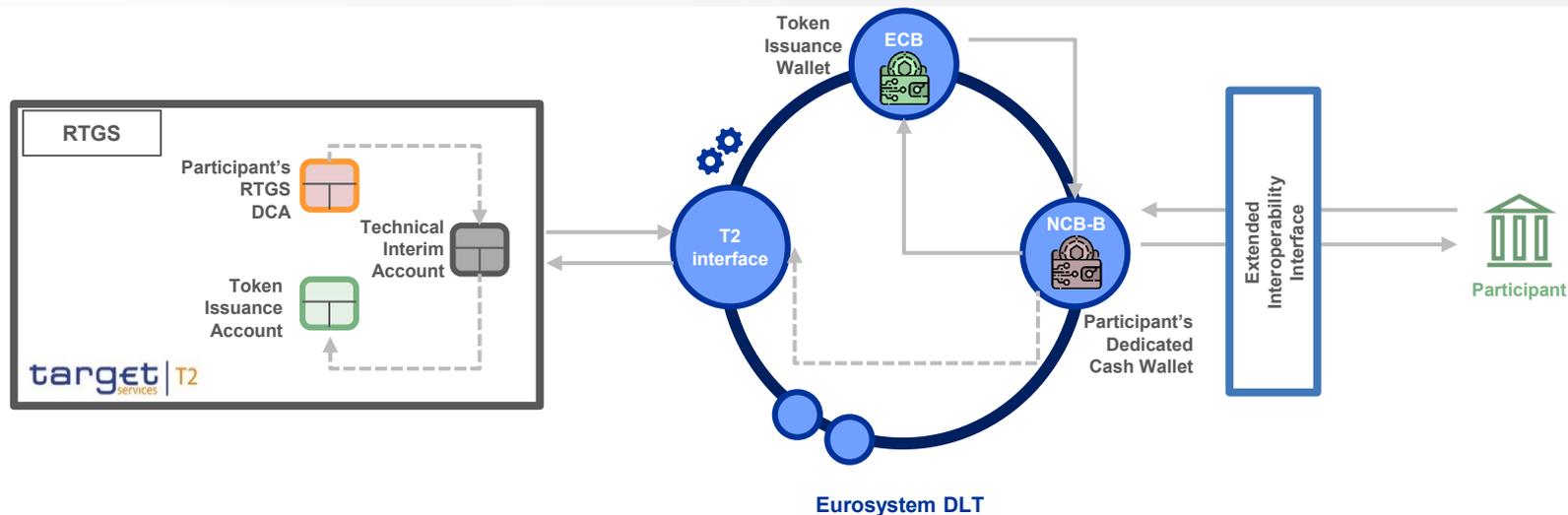
Payment-versus-Payment (PvP)

- Euro Central Bank money versus commercial bank money
- Euro Central Bank money versus electronic money (e-money) tokens

Wholesale payments

- Euro denominated single payments

Pontes Initial Launch – A more detailed architecture



Additional technical details can be found in the [Market Contact Group presentation](#) and in the [Pontes Initial Launch Service Description](#) once published on the [ECB website](#)

Pontes Initial Launch – Business and technical documentation



Business Description Document (BDD)

- Introduction to the functions of the Pontes Initial Launch from the market participants' perspective
- Overview of the solution, its operations, purpose, functionalities and objectives...

The document is available on the [ECB website](#)



Service Description

- Technical details required to the users to connect and interact with the Pontes Initial Launch
- Description of the functional flows and scenarios
- Application Programming Interface (API) documentation
- Processes for onboarding and technical integration...

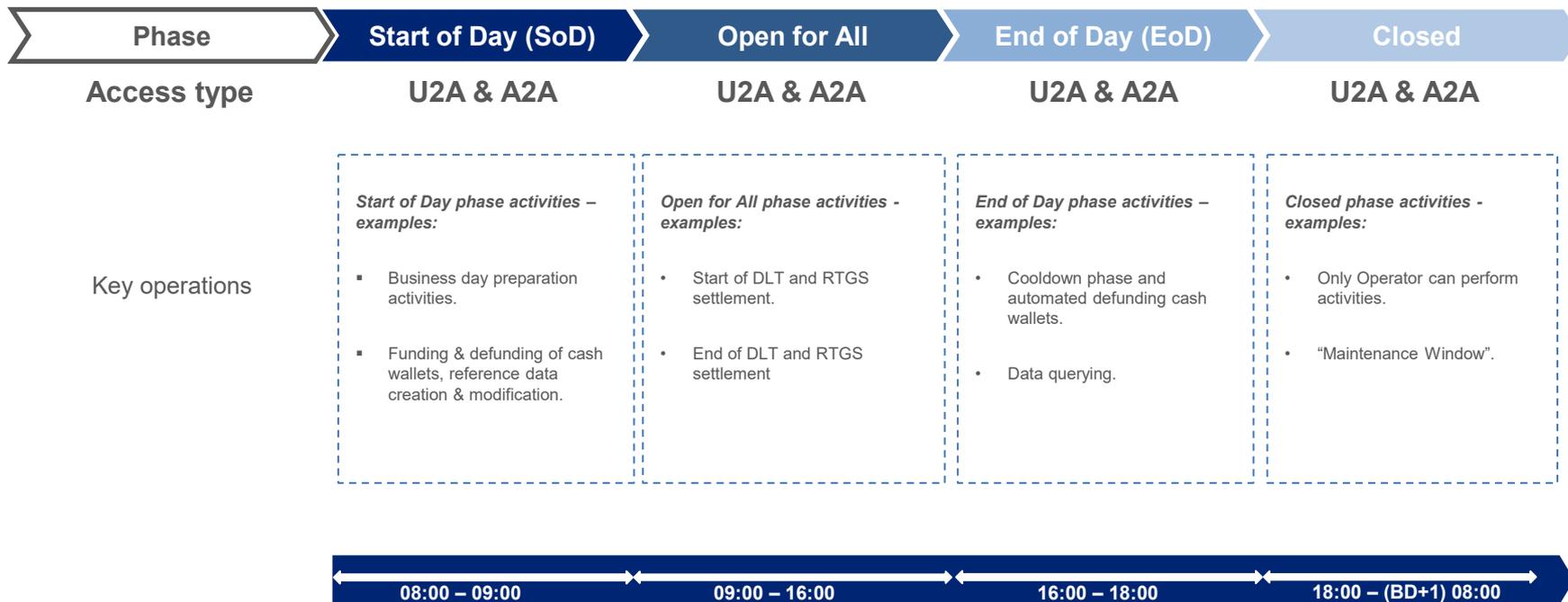
The document will be soon available on the [ECB website](#)

Operational framework – Opening days & hours

Pontes Initial Launch - opening days, public holidays, operating hours and operating day phases

- ❑ **Opening days:** Pontes Initial Launch is operating on weekdays from **Monday to Friday and closed on Saturday and Sunday**. Furthermore, the **public holidays** observed by **T2 for EUR** also apply to Pontes Initial Launch.
- ❑ **Public holidays** (observed by T2 for EUR): 01 January (New Year's Day), Good Friday, Easter Monday, 01 May (Labour Day), 25 December (Christmas Day), 26 December. For details on referenced T2 operating days, see also on the ECB [website](#).
- ❑ **Operating hours:** Pontes Initial Launch is operating between **08:00 and 16:00** during opening days.
- ❑ **Operating day phases:** Details on the following slide.

Operational framework – Operational day phases

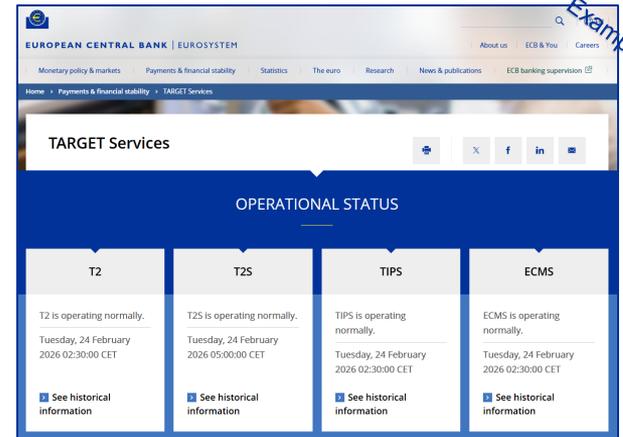


Operational framework – External communication

 **External communication** tools are used for communication with the participants and/or the public and in addition to internal communication channels for the communication among Central Banks

- ❑ The [ECB's website](#) currently provides information on the operational status of the TARGET settlement services – for the attention of participants and the public.
- ❑ Information is reported separately per service but visible on the same website page. In case of abnormal situations in the respective TARGET settlement service, the information provided includes the type of failure, its impact as well as the measures envisaged to resolve the problems.
- ❑ The **Pontes Initial Launch** operational status will be visible on the same page as of go-live date.

Example



The screenshot shows the 'TARGET Services' page on the ECB website. It features a table with the following data:

T2	T2S	TIPS	ECMS
T2 is operating normally. Tuesday, 24 February 2026 02:30:00 CET See historical information	T2S is operating normally. Tuesday, 24 February 2026 05:00:00 CET See historical information	TIPS is operating normally. Tuesday, 24 February 2026 02:30:00 CET See historical information	ECMS is operating normally. Tuesday, 24 February 2026 02:30:00 CET See historical information

Operational framework – Documentation



“Information Guide”

- **Operational documentation**, due to its sensitivity, is in general only shared with the **participating Central Banks** (CBs) i.e. access to such documentation is **restricted**.
- However, and due to the explicit request by the participating CBs, there will be one exception, detailing relevant operational aspects for the wider public for Pontes Initial Launch. The respective document* for Pontes Initial Launch will be comparable to the Information Guide for TARGET participants (T2).
- See as reference / example [ECB website](#) → T2 Documentation → T2 Participation/Registration → Supporting Documents

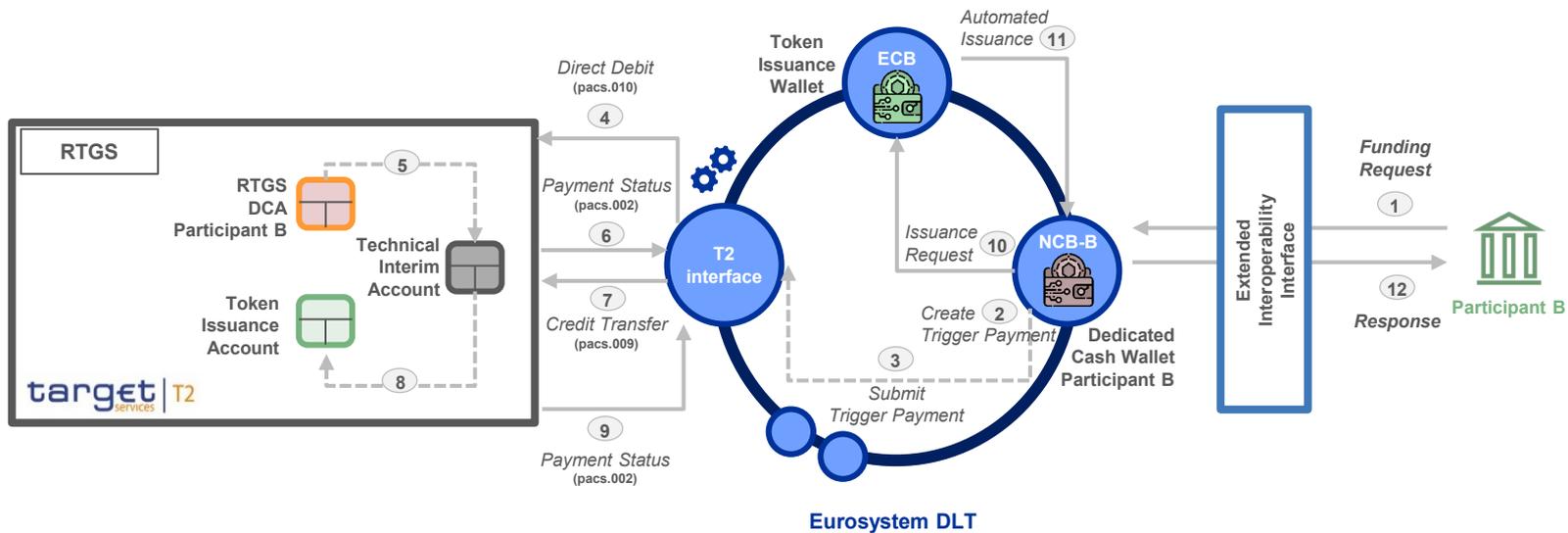


**Note: Drafting and publication of this document is subject to the finalisation and approval of other relevant internal operational documentation (e.g. operational Terms of Reference) and therefore only expected closer to the actual go-live of Pontes Initial Launch.*

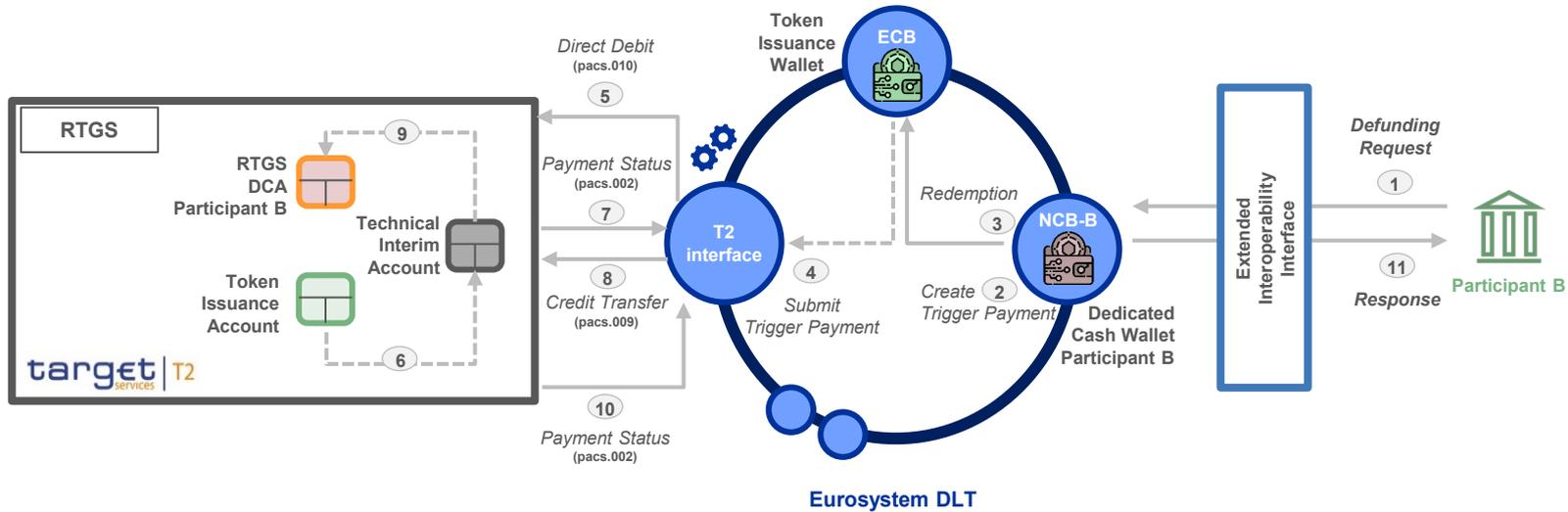
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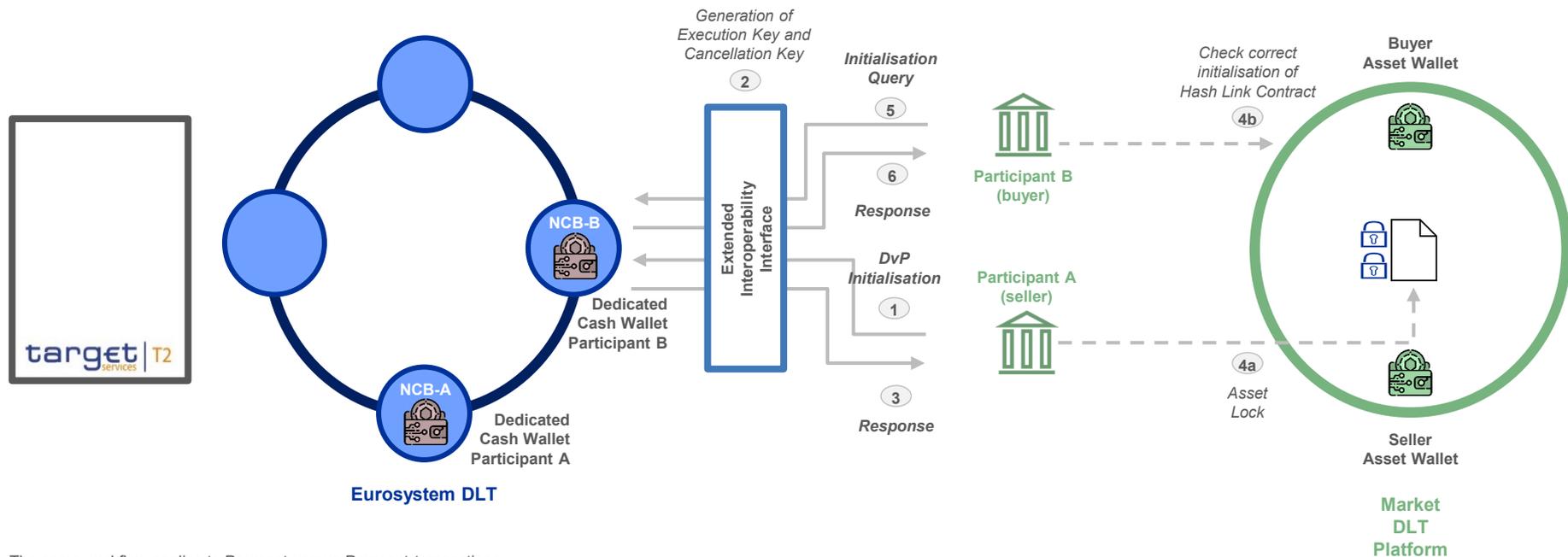
Funding process



Defunding process



Delivery-versus-Payment – initialisation

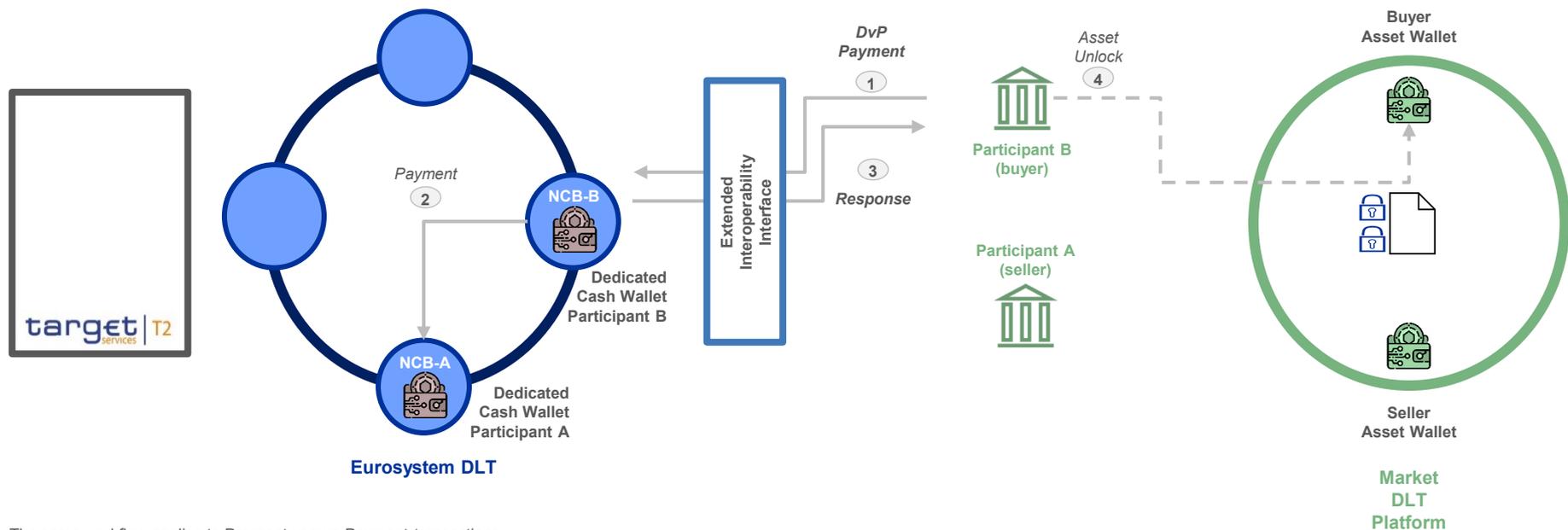


The same workflow applies to Payment-versus-Payment transactions

The example refers to a scenario in which cash tokens are used

Additional technical details can be found [here](#) and in the Pontes Service Description once published on the [ECB website](#)

Delivery-versus-Payment – payment (happy path)

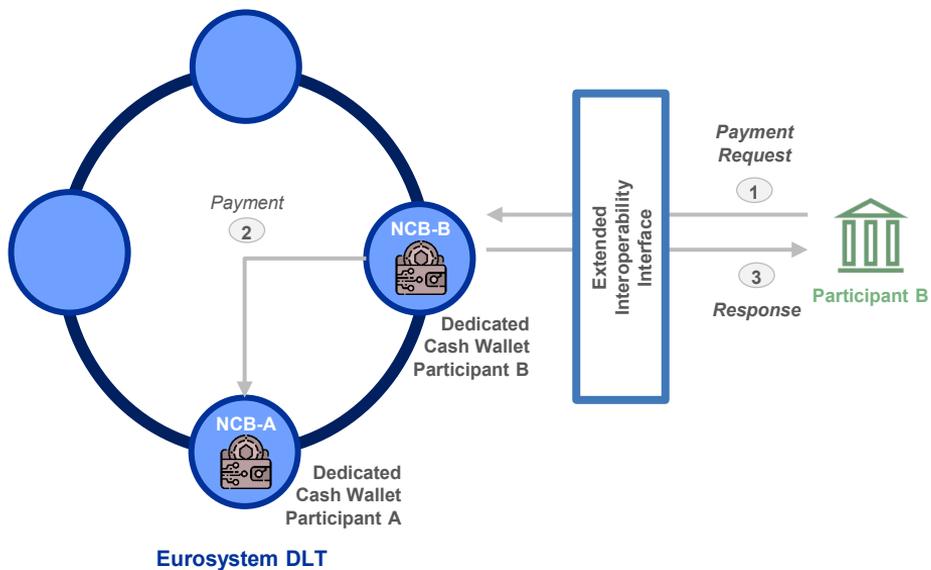


The same workflow applies to Payment-versus-Payment transactions

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Payment with cash tokens



Payment with direct settlement in T2

