EUROPEAN CENTRAL BANK

EUROSYSTEM

Deferred digital euro defunding for business users



T2-CG

21 October 2026

Agenda

1. Overview of digital euro defunding: from instant to deferred
2. Deferred defunding for business users: legal basis and design criteria
3. Questions for T2 Contact Group on deferred defunding design options



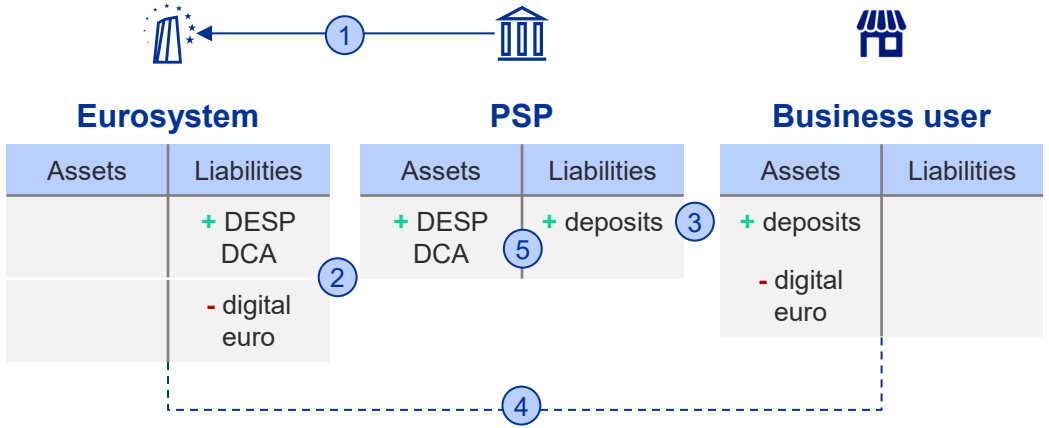
Overview of digital euro defunding

From instant to deferred

Defunding is the process of converting digital euro into commercial bank money, which affects the PSP's balance sheet[1]

Digital euro defunding at a glance

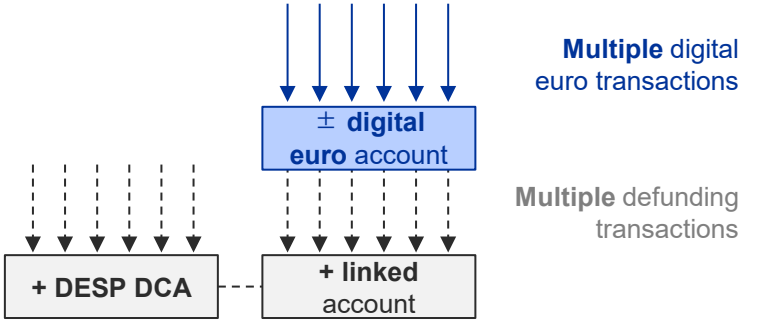
1. The defunding starts when the PSP submits the **defunding transaction to the Eurosystem** specifying the DESP DCA to be credited
2. The **PSP's DESP DCA is credited** and the user's digital euro holdings in the DESP settlement ledger are debited
3. The DESP confirms the successful defunding to the PSP. The **PSP credits the user's non-digital euro payment account**
4. The user's digital euro holdings are reflected as a **direct liability** of the Eurosystem[2]
5. The movements are reflected on the PSP's balance sheet as **increased assets** (more reserves at the central bank) and **increased liabilities** (as there are more deposits)



1) PSP that provides the linked non-digital euro account; can be the same as the digital euro PSP or a different one (see Annex); 2) Only the PSP knows the link between the funds and the identity of the user.

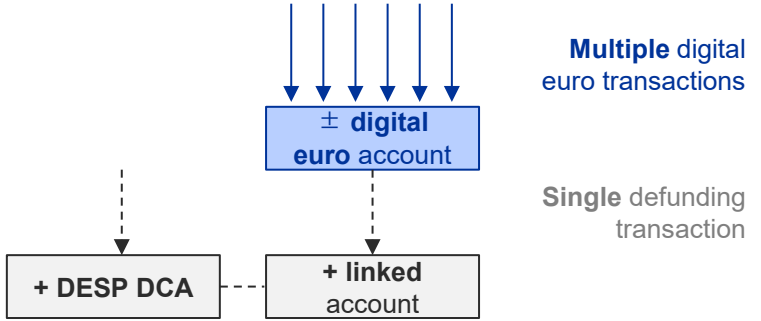
Deferred defunding would allow business users to temporarily accumulate digital euro, reducing the number of defunding transactions

Instant defunding implies immediate redemption of digital euro hence an account balance of zero…



- **Defunding transaction atomically linked** to digital euro transaction settlement (so-called waterfall mechanism)
- Strict zero-holding limit for business users **enforced continuously**
- For each business account, **as many defunding transactions** as digital euro transactions received

… while **deferred defunding** allows (temporary) accumulation of digital euro hence a positive balance



- **Defunding operation decoupled** from digital euro transaction settlement
- Temporary, **non-permanent holdings throughout the day**
- For each business account, **fewer defunding transactions** than digital euro transactions received

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Deferred defunding for business users

Legal basis and design criteria

The co-legislators have opened the door to deferred defunding in the draft digital euro regulation

Council

- "(33ab) *[…] it may be appropriate to apply stricter holding limits to legal persons than to natural persons in order to safeguard financial stability. Furthermore, the holding limit for legal persons should be set in a manner that is proportional to business activity.* ***The holding limit applying to legal persons, including a zero holding limit, should nonetheless allow those persons to automatically defund their digital euro holdings with a pre-established regularity*** *(for example, at the end of each business day, similarly to the emptying of cash registries),* ***even if this implies exceeding the holding limit within that limited timeframe."***

Parliament

- *"(32b) As a general rule, legal persons should not maintain any digital euro holdings. Nonetheless,* ***legal persons, when acting as payees in digital euro payment transactions, should be allowed to temporarily accumulate digital euro holdings of incoming digital euro payments for a maximum period of 24 hours,*** *to allow for consolidated defunding operations that combine multiple individual defunding operations ('batch defunding'), similar to the emptying of cash registries. Additionally, allowing legal entities to temporarily maintain holdings of digital euro with no limits during severe disruptions of the network is appropriate to ensure that citizens are not deprived of a sovereign payment solution in crisis situations. As soon as the network disruption comes to an end, such temporary holdings should be automatically defunded to the corresponding non-digital euro accounts"*

Non-negotiable design elements for deferred defunding:

1. Business users' digital euro holdings shall be only **temporary, intra-day**
2. Deferred defunding is an **alternative modality, not a substitute** of instant defunding
3. Business users **always have the choice** between instant and deferred defunding as default modality

The design of deferred defunding shall strike a balance between all stakeholders' interests

Benefits and objectives of deferred defunding for key stakeholders

Eurosystem

- Improve digital euro **resilience**
- Avoid excessive **incremental deposit outflows**

Digital euro PSP

- Facilitate digital euro **transaction management**
- **Enrich value proposition** vis-à-vis business clients

Business user

- Facilitate **reconciliation** operations
- **Preserve flexibility** and benefits of instant defunding

Commercial bank money PSP[1]

- Reduce number of **DESP DCA movements** throughout the day
- **Minimize impact** on end-of-day T2 liquidity

1) Assuming different from digital euro PSP



Questions for T2-CG on deferred defunding design options

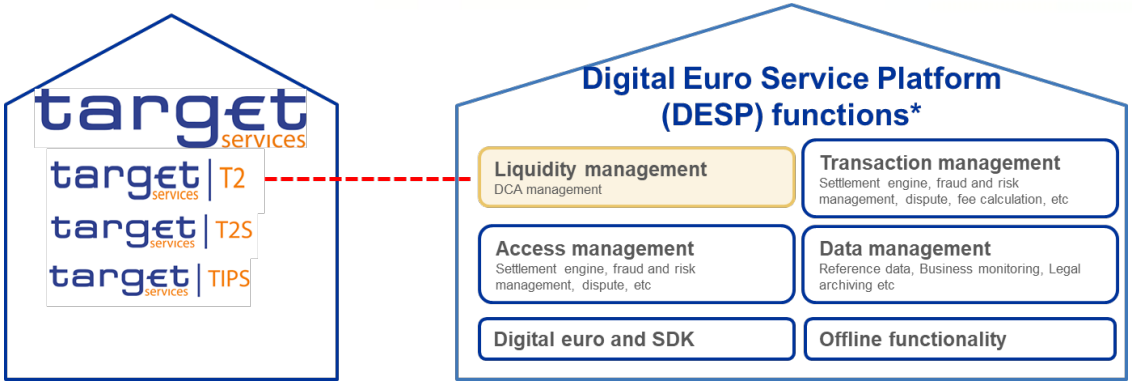
Questions for T2-CG

- Should acquiring PSPs have **flexibility in the timing of deferred defunding operations or be obliged to defund at certain times (or time ranges) throughout the day?** In the latter case, which would be the optimal timing of defunding, e.g., at end-of-calendar day, end-of-T2 day, multiple times a day and why?
- Which **impact do you foresee for your institution's T2 liquidity** as an effect of business users being offered the possibility to hold digital euro funds intra-day?

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Appendix

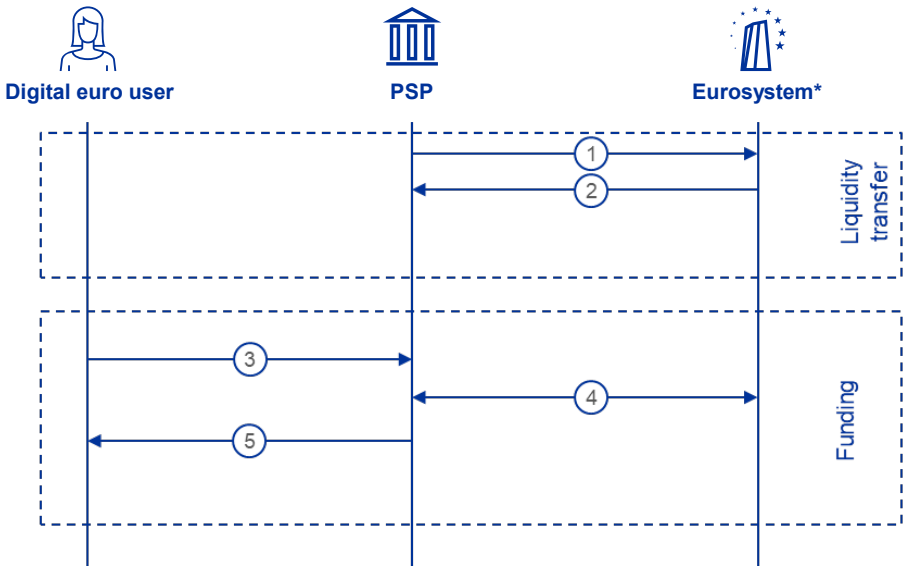
TARGET services and DESP



- **DESP DCAs will interact with the Main Cash Accounts (MCA) in T2-CLM** to support the provision of liquidity to the DESP platform.
- The **balances in the DESP DCAs belong to the DCA Holders**, while the **holdings in digital euro reflected in the DESP settlement ledger belong to digital euro users**.
- In addition to liquidity transfers, there will be **further interactions between DESP and TARGET** to support the functioning of the DESP DCA in relation to CLM related to **general ledger file, reference data and queries**. The full list of interactions is defined in CR T2-0150 raised to support the implementation of the digital euro.

* High level and non-exhaustive representation of functionalities included in the DESP design. The functions will be offered by different components which are currently being sourced internally within Eurosystem and externally

Digital euro liquidity management in detail



The distribution of the digital euro entails **two distinct but related processes**. These are **liquidity transfer** and **funding/defunding** both **relying on DESP Dedicated Cash Accounts (DCAs)**.

The **main steps** of the process are the following:

1) PSP as DCA Holder requests liquidity transfer from the Eurosystem responsible of the TARGET Services (e.g. CLM);

2) The Eurosystem debits the PSP's CLM MCA and credits DESP DCA;

3) Digital euro user asks to credit its digital euro holdings;

4) Upon user's requests, PSP asks the Eurosystem to debit its DESP DCA and credit user's digital euro holdings;

5) PSP debits user's non-digital euro payment account and confirms an increasing of user's digital euro holdings.

* Whereas the PSP knows the identity of the end user and uses it for e.g. AML/CFT compliance, the Eurosystem as operator of the settlement ledger is not aware of the identity of the end user.

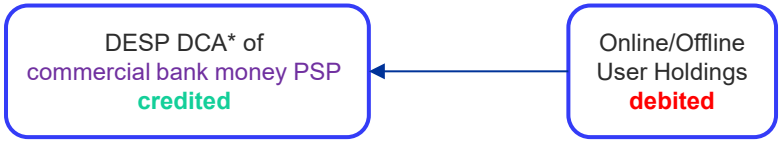
Digital euro transactions involving DESP DCAs

Funding online/offline digital euro holdings



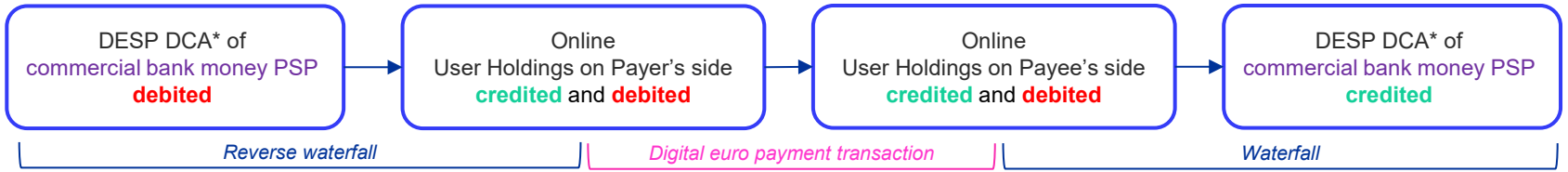
See Digital Euro Scheme Rulebook subsection 3.5.3.1 “Funding”

Defunding online/offline digital euro holdings



See Digital Euro Scheme Rulebook subsection 3.5.3.2 “Defunding”

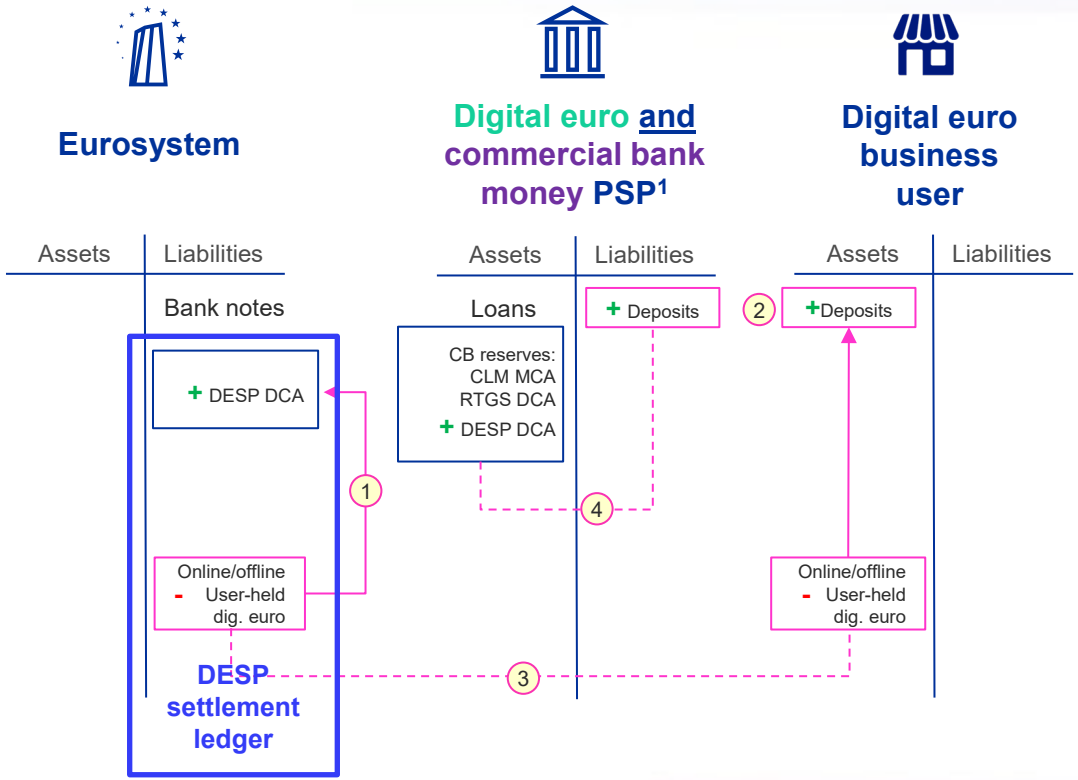
Combined online digital euro payment transaction involving reverse waterfall, or waterfall, or both (processed as one *atomic* transaction)



See Digital Euro Scheme Rulebook subsections 3.5.3.3 “Reverse waterfall” and 3.5.3.4 “Waterfall”

* The DESP DCA can be either the DCA held directly by the commercial bank money PSP (being a DESP DCA Holder), or a DESP DCA that the PSP is authorised to use (via an Authorisation Link or CMB).

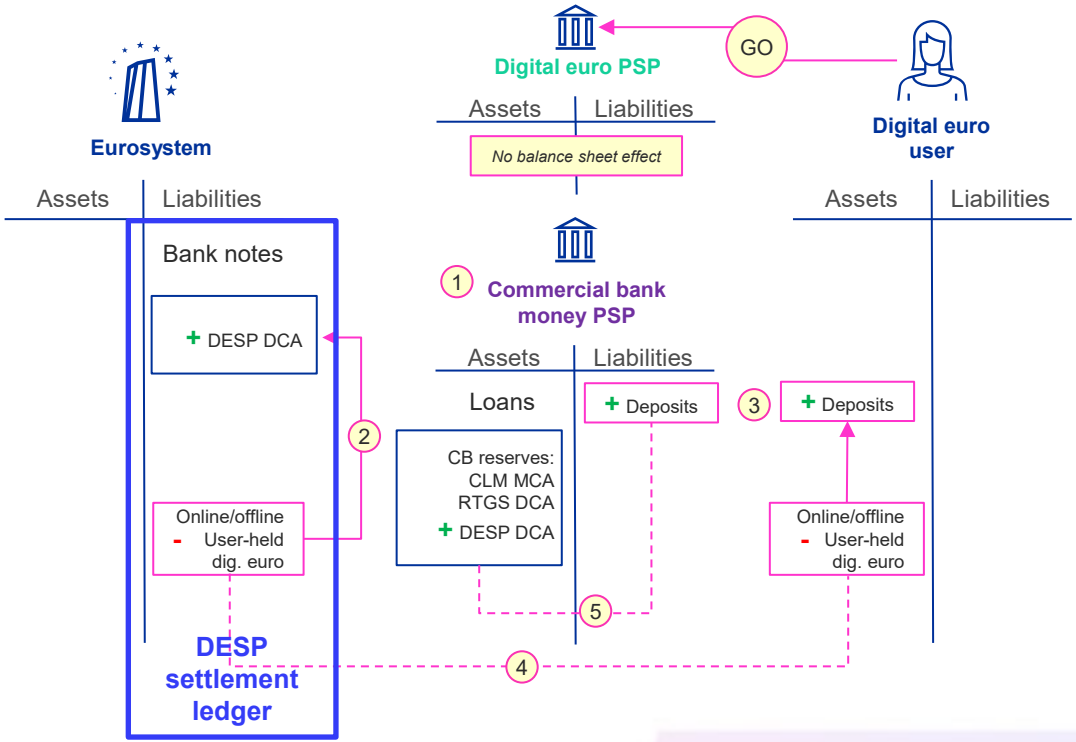
Defunding is the process of converting digital euro into commercial bank money, which affects the balance sheet of the commercial bank money PSP



- (GO) Business user requests its PSP for defunding of their digital euro holdings. The PSP submits the defunding transaction to the Eurosystem including the DESP DCA to be credited.
- (1) The PSP's reserves in the DESP DCA are credited and the user's digital euro holdings in the DESP settlement ledger are debited. This is the moment when digital euro is redeemed.
- (2) The DESP confirms the successful defunding to the PSP. This is the latest point in time the PSP credits the user's non-digital euro payment account.
- (3) The user's digital euro holdings are reflected as a direct liability of the Eurosystem (online in the ledger, or offline on the offline device). However, it's the PSP who knows the link between the funds and the identity of the user.
- (4) The movements are reflected on the PSP's balance sheet as increased assets (more reserves at the central bank) and increased liabilities (as there are more deposits) for the same amount.

1) Commercial bank money payment service provider (PSP): A PSP that provides non-digital euro payment accounts.

Defunding to non-digital euro payment account – *different PSPs*



- **(GO)** Digital euro user requests their **digital euro PSP** for defunding of their digital euro holdings. The PSP submits the defunding request to DESP addressing the **commercial bank money PSP** who is providing the non-digital euro payment account.
- **(1)** The **commercial bank money PSP** receives the defunding request via DESP and checks the user's deposits account. The PSP submits the acceptance of the defunding transaction including the DESP DCA to be credited.
- **(2)** The **commercial bank money PSP's** reserves in the DESP DCA are credited and the user's digital euro holdings in the DESP settlement ledger are debited. This is the moment when digital euro is redeemed.
- **(3)** The DESP confirms the successful defunding to both PSPs. This is the latest point in time the **commercial bank money PSP** credits the user's non-digital euro payment account.
- **(4)** The user's digital euro holdings are reflected as a direct liability of the Eurosystem (online in the ledger, or offline on the offline device). However, it's the **digital euro PSP** who knows the link between the funds and the identity of the user.
- **(5)** The movements are reflected on the **commercial bank money PSP's** balance sheet as increased assets (more reserves at the central bank) and increased liabilities (as there are more deposits) for the same amount.