SERVICE DESCRIPTION

OF THE BDF FULL DLT INTEROPERABILITY SOLUTION FOR THE EUROSYTEM EXPLORATORY WORK

240

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1. Introduction

1.1. European Pilot Regime and Eurosystem exploratory work

The European Pilot Regime is a specific regulation framework which started in March 2023, for 3 years and renewable. It is focused on trading and settlement of tokenized or native DLT financial instruments (under some conditions). Among the 3 licences proposed (DLT MTF, SS, TSS1), two (DLT SS or DLT TSS) involve a cash asset which can be either a CoBM or CeBM when available.

The Eurosystem seeks to ensure that developments in central bank money (CeBM) keep pace with and contribute to digital innovation in wholesale payments. The Eurosystem has conducted:

- market outreach activities: to better assess the market's needs, demands and development regarding new technologies for settling wholesale financial transactions in CeBM
- analysis of various technical solutions for settling in CeBM using new technologies.

The Eurosystem exploratory work has been established to gain practical insights into different solutions together with the market. Although targeting candidates licensed under the Pilot Regime, these exploratory work may also encompass candidates subject to other eligibility criteria².

1.2. BdF Full DLT Solution

In this context and based on its wCBDC experiments program, Banque de France aims at providing a DLT platform, namely "DL3S" (Distributed Ledger for Securities Settlement System) that is a private and permissioned DLT (based on Hyperledger Fabric) and for which BdF is both provider and operator.

Banque de France is one of the Solution Provider Central Banks in the exploratory works and provides "Exploratory Cash Tokens" (ECT) on the DL3S platform for eligible participants.

The Banque de France has identified among the 3 models (Interoperability, Distribution, and Integration) experimented in its wCBDC program:

- The Interoperability model as the easiest model to implement rapidly
- The Distribution and Integration models to be studied in parallel.

The Interoperability focused models are TIPS Hash Link provided by BdI, Trigger Bridge provided by BBk and Full DLT Interoperability provided by BdF for the Eurosystem exploratory work.

1.3. ECT definition and qualification

The Exploratory cash tokens (ECT) issued on the Cash DLT platform by Banque de France or by any national Central bank of the Eurosystem shall not be considered as legally defined tokenised CeBM within the meaning of Pilot DLT Regime or any other regulations.

For the purpose of the BdF Full DLT Interoperability solution, the ECT represent the contractual undertaking of Banque de France (or any National Central Bank of the Eurosystem) to transfer CeBM in TARGET to any relevant TARGET participant, owner of ECT, in accordance with the rules applicable to the Eurosystem exploratory work. The purpose of the ECT is to simulate the entire behaviour of a wCeBM cash token as it could be implemented in a Full DLT solution Interoperability, with the aim to assess such solution under exploratory work conditions.

² See Eurosystem eligibility for the exploratory work

¹ That stands for DLT Market Trading Facility, DLT Securities Services and DLT Trading and Securities Services



1.4. Service Description - purpose

This document provides a detailed overview on the Cash DLT key features in terms of organisation and services. It covers the overall Cash DLT platform set up and key interactions with RTGS TARGET systems. As such it provides (more specifically under its onboarding procedures in annexes) the specification and steps to perform in order to join the exploratory work with the Full DLT Interoperability solution. This document is dedicated to an audience composed by Cash DLT participants and Market DLT operators eligible to the exploratory work. Per the agreed process, local NCBs lead the eligibility assessment for market participants and Market DLT Operator of their jurisdiction.

1.5. Interoperability model – high level view

1.5.1. The overall operating model supported by Banque de France

Banque de France will operate the Cash DLT ("DL3S") interconnected with Market DLT(s) from which tokenised financial instruments transactions will trigger payments in ECT. This DLT infrastructure is defined as the Interoperability Model where the Market(s) and Cash DLTs are operated independently from each other; i.e. by Banque de France as DL3S operator on one hand and the Market DLT operator on the other.

1.5.2. Interoperability model (with one Market DLT)





1.5.3. Interoperability model (with two Market DLTs and two NCBs)



In these examples, commercial banks A, B and C are participants to the Cash DLT platform ("Payment bank on DLT") and Market DLT platforms ("Security Custodians"). It is up to commercial banks to decide which Cash and / or Market DLT platforms they want to on-board. For example, a commercial bank can become participant of a Market DLT and outsource cash settlement to a third party, i.e. another commercial bank being participant of the Cash DLT platform.

2. Cash DLT participants

All Cash DLT participants use the Cash DLT network operated by Banque de France (see details in section 4). Cash DLT participants are either National Central Banks (NCB), Payment bank on DLTs (PBD) and (optional) clients of the Payment bank on DLT (i.e. Clients³).

The below section aims at detailing conditions for accessing the Cash DLT platform as well as roles, responsibility and the overall functions available in the Cash DLT platform.

2.1. National Central Banks (NCB)

NCB participating to Cash DLT are Eurosystem central banks. They play several potential roles according to their mandate. Consequently their roles are taking different forms which are described here under.

The NCBs participating to the Cash DLT platform are in charge of:

- Managing Payment banks on DLT placed under their own jurisdiction,
- Holding under an escrow account in the RTGS. Payment bank on DLT from the NCB jurisdiction transfer the amount in Euro based upon which ECT will be issued and distributed to them;

³ Clients could be any kind of financial institutions i.e. (none RTGS) commercial banks, asset owners, asset managers, private banks, corporates, etc.



- Minting, distributing and burning the ECT⁴;
- Creating, monitoring, amending and closing Dedicated Cash Wallets of the Cash DLT participants under their jurisdiction;
- Supervising the overall Cash DLT activity which means having access to the overall Dedicated Cash Wallets and Dedicated Cash sub-wallets⁵ balances and transactions of the Cash DLT participants under their jurisdiction;
- Ensuring the regulation is applied and market best practices are used in accordance with the Market DLT operator.
- Granting and removing access to the Cash DLT platform to Payment bank on DLTs: each NCB is in charge of authorising the Payment bank on DLT on the Cash DLT (equivalent to white listing, i.e. granting process for authorizing a Cash DLT participant).
 Operationally it is reflected as the creating, amending or deleting Dedicated Cash Wallets granted to the Payment bank on DLTs.
- Providing and holding the Payment bank on DLTs access means to the Cash DLT.
- Have the same right and capacity to interact with the Cash DLT as any other Payment bank on DLT (holding ECT and performing transactions);
- Consult Payment bank on DLT Dedicated Cash Wallets' balances and transactions history (issuance, redemption, transfers) under its jurisdiction (thanks to National ECT Supervisor⁶).
- Are in charge of the Hash Timed Locked Contracts (HTLC) for its managed exploratory cash token Dedicated Cash Wallets (i.e. Payment bank on DLT's wallets) for movement's intra Cash DLT and with Market DLTs.

The Banque de France is the Cash DLT operator

- Banque de France is the technical provider and operates the Cash DLT platform ("DL3S Operator");
- BdF manages the overall network configuration with the set up or removal of Cash DLT participants (roles...); i.e. granting, via the creation of the nodes and wallets, to NCBs and Payment bank on DLTs access to the Cash DLT;
- It monitors, in coordination with the Market DLT operator, the interoperability mechanism(s) between the Cash and Market DLTs, ensuring trustless ECT payment executions.

2.2. Payment bank on DLT

The Payment bank on DLT is governed by the National Centrals Bank of its own jurisdictions. Once authorised by the latter, Cash DLT access is granted via the attribution of a node (optional - see details in section 4) and Dedicated Cash Wallet(s) on the Cash DLT platform.

The Payment bank on DLT is a Cash DLT participant being regulated financial institutions only (i.e. credit institutions and investment firms as far T2-BF is concerned) and direct RTGS participant.

For being declared formally as Cash DLT participant, it is required to agree with the overall Cash DLT membership framework. It is formalised by a legal convention signed by the Payment bank on DLT representatives and the NCB of its own jurisdiction. The enclosed Service Description and the

⁴ BdF and other involved NCBs address to one shared wallet ("Transit" wallet) their request to mint, distribute and burn exploratory cash tokens on the Cash DLT platform upon request from the Cash DLT participants.

⁵ Dedicated Cash sub-wallets: Dedicated Cash Wallets owned by the Payment Bank on DLT and dedicated to the usage of its clients.

⁶ "National ECT Supervisor" is a status provided to NCB allowing supervision of all ECT transactions involving Cash DLT participant of its own jurisdiction only.



Operational Forms are part of the overall process to set up the Cash DLT network and to deploy the access rights to the Payment bank on DLT.

Payment bank on DLT and Securities Custodian are managed in a consistent but independent manner from each other within the Cash and Market DLT platforms. When an event is triggered such as security delivery from a seller to a buyer, both "Security Custodian" and "Payment bank on DLT" can differ respectively from each other in both DLTs. Each Payment bank on DLT has to designate one or several Security Custodian(s) on the Market DLT. As key role, the Payment bank on DLT manages the overall cash operations for itself and third parties. Payment executions are triggered by market events taking place on the Market DLT connected to the Cash DLT. They are performed under the Payment bank on DLT's responsibility.

The role of the Payment bank on DLT encompasses two types of actions: static data management and payment executions its clients:

Static data management consists in:

- Creating, monitoring, amending and closing Dedicated Cash Wallets used by its clients. The Dedicated Cash Wallet being a technical object where ECT balances are managed, payments operations are instructed and instructions history is accessible to the Payment bank on DLT;
- Holding the clients' private keys and more broadly ensuring the clients have the "read only" access, via their Dedicated Cash sub-wallets, to their cash balances and payment instructions history on the Cash DLT platform.

Payment executions consist in:

- Managing its ECT positions using a unique Dedicated Cash Wallet for all Market DLTs (or one per Market DLT up to their choice⁷)
- Receiving ECT on its Dedicated Cash Wallet (following a cash transfer in fiat from its RTGS account to the NCB escrow account in TARGET);
- Executing ECT transfers between its Dedicated Cash Wallet and its clients' Dedicated Cash sub-wallets or between its own Dedicated Cash Wallets;
- Executing ECT transfer triggered by an operation executed on the Market DLT for its Clients' Dedicated Cash Wallets. Overall market DLT operation types triggering ECT payment are defined into the operating and business model defined jointly between the DL3S Operator and the Market DLT operator.
- Holding ECT on its own Dedicated Cash Wallet or its clients' Dedicated Cash sub-wallets;
- Requesting ECT burning (that triggers a cash transfer in fiat from the NCB escrow account to its RTGS account in TARGET).

The Payment bank on DLT is a **Dedicated Cash Wallet Owner and** (if it has Clients) **Dedicated Cash Wallet Custodian** as it is entitled to create, amend and delete its clients' wallets.

Payment bank on DLT is in charge of the **Hash Timed Locked Contracts (HTLC)** for its managed exploratory Dedicated Cash Wallets (i.e. Clients' wallets) for movement's intra Cash DLT and with Market DLTs.

Should a specific support be needed, the Payment bank on DLT is entitled to request it to the DL3S Operator and the Market DLT operator.

⁷ In this case, whitelisting is not detailed per wallet but only at the Payment bank on DLT level. It is the responsibility of the Security Custodian of the market DLT to configure the right Dedicated Cash wallet.



Please read the Onboarding procedures in annex for further details regarding the steps and specifications needed to onboard a Payment Bank DLT.

2.3. Payment bank on DLT's clients

The Payment bank on DLT is solely in charge of maintaining relationships with its clients according to the contractual framework agreed between both parties. The Payment bank on DLT remains the final holder of the ECT credited in each client's Dedicated Cash sub-Wallet. This is the responsibility of the Payment bank on DLT to conduct the overall Know Your Customer and Anti Money Laundering processes.

The Payment bank on DLT client is granted a specific "read only" access to the Cash DLT. **The client is a Dedicated Cash Wallet User** which cannot interact directly with the Cash DLT. Any action related to payment execution is performed by the Payment bank on DLT. It can open a dedicated "wallet" for segregation purpose, called "Dedicated Cash sub-wallet", which remains under the name of and is operated on its behalf by the Payment bank on DLT.

The client "read-only" access encompasses cash balances and overall movements on the used Dedicated Cash sub-wallet corresponding to market executions such as DvPs, redemption... any market event triggered by the Market DLT. The client ECT balance represents the purchasing power allocated by the Payment bank on DLT, it is reflected in the Dedicated Cash "sub-wallet".

The Payment bank on DLT Dedicated Cash sub-Wallets are **overall connected to the Payment bank on DLT**, itself connected to the RTGS account belonging to the Payment bank on DLT. The Payment bank on DLT remains the executing Party of any Market DLT operation triggering payments for its clients. The NCB remains the executing Party of any Market DLT operation triggering payments for the Payment bank on DLT

The client's access rights (logins and cryptographic accesses) are provided by the Payment bank on DLT.

With the Dedicated Cash sub-Wallet feature, Banque de France aims at offering the capacity to Payment bank on DLT to segregate the cash positions and operations at Client level. This service remains optional, the Payment bank on DLT can represent its Clients, i.e. client purchasing power in a net or gross basis in a single or multiple Dedicated Cash sub-wallets.

Please read the onboarding procedures in annex for further details regarding the steps and specifications needed to onboard a client of a Payment Bank DLT

2.4. Cash DLT profile typology

Cash DLT participant's capacity to interact with the Cash DLT platform is constructed according to the ECT wallet features detailed here under. Cash DLT roles are aligned with the services allowed for each type of Dedicated Cash Wallet.

- **ECT Issuer** granted to NCBs, it allows the ECT issuance (minting), distribution and redemption (burning). The setup is done by Banque de France acting in its capacity as the DL3S Operator.
- Dedicated Cash Wallet Manager: granted to NCBs, it allows to create Dedicated Cash Wallets for Payment banks on DLT and for itself. It instruct ECT transfer and redemption and to view balance and transactions' history for its owned and managed Dedicated Cash Wallets (NCB's Payment bank on DLT wallets of its own jurisdiction). The setup is done by Banque de France acting in its capacity as the DL3S platform operator.



- Dedicated Cash Wallet Owner: granted to Payment bank on DLTs (and NCBs⁸), it allows to own Dedicated Cash Wallets, instruct ECT transfer, redemption and view balance and transactions' history for these Dedicated Cash Wallets. The setup is done by Banque de France acting in its capacity as the DL3S DLT platform operator to define rights to each of Payment bank on DLT.
- Dedicated Cash Wallet Custodian: granted to Payment bank on DLTs, it allows to create Dedicated Cash Wallets for their clients' exclusive usage. It also allows to instruct ECT transfer, redemption and view balance and transactions' history on these wallets. The setup is done by Banque de France acting in its capacity as the DL3S DLT platform operator to define rights to each of Payment bank on DLT.
- Dedicated Cash Wallet User: granted to Payment bank on DLTs' clients, it allows to have a read only access on the Dedicated Cash Wallets created by its Payment bank on DLT (i.e. no instruction right) and view Dedicated Cash Wallet balance and transactions' history. The setup is done by the Payment bank on DLTs⁹.

| Business | ECT | Dedicated | Dedicated | Dedicated | Dedicated | National |
|--------------|--------|-----------|-----------|-------------|-----------|------------|
| typology | Issuer | Cash | Cash | Cash Wallet | Cash | ECT |
| | | Wallet | Wallet | custodian | Wallet | supervisor |
| | | owner | manager | | user | 10 |
| NCBs | Х | Х | X | | | Х |
| Payment | | х | | X | | |
| bank on | | | | | | |
| DLTs | | | | | | |
| Clients | | | | | х | |
| of | | | | | | |
| Payment | | | | | | |
| bank on | | | | | | |
| DLTs | | | | | | |
| Other | | х | | | | |
| entities | | | | | | |
| (being RTGS | | | | | | |
| participant) | | | | | | |

Any other roles such as security issuer, security supervisor, market DLT platform operator or security custodian are not covered in this Cash DLT Service Description (but rather by the Market DLT).

⁸ Case where a NCB holds ECT and perform transactions for itself.

⁹ NCBs only have a read-only access to sub-wallets thanks to its Supervisor NCB status.

¹⁰ Each NCB is "National ECT Supervisor" and supervises its own jurisdiction only.



3. Liquidity management: how ECT is operated

In the context of the BdF full DLT Interoperability solution, the payments' finality remains in RTGS. To do so, activities done on the Cash DLT are prefunded by commercial banks through a BdF RTGS escrow account (or the NCB ones of their jurisdiction). Participating NCBs will coordinate to handle accurate end-of-day alignments between NCB escrow accounts.

3.1. Key principles

To obtain exploratory cash tokens on chain, Payment bank on DLTs transfer funds from their RTGS account in TARGET to the NCB escrow account of their jurisdiction. Funds held in the NCB escrow account belong to the NCB. They become the property of the NCB operating the escrow account. In return, the NCB shall provide ECTs to the participant and, when such ECTs are burnt, shall return funds from the escrow account to the account designated by the participant submitting the ECTs.

Each NCB has to:

- Be the entry point for commercial banks at national level
- On-board and check TARGET account's reference of commercial banks under its jurisdiction
- Open an individual escrow account
- Check funding and process to defunding movements
- Take in charge the mint and burn process on the Cash DLT platform (via an access to DL3S). This last action can be made by BdF, on behalf of the NCB if requested.

Each Payment bank on DLT has to:

- Get in contact with its national central bank
- On-board and confirm TARGET account's reference with the NCB of its jurisdiction
- Fund its NCB escrow account
- Process funding and check defunding movements operated by its NCB

3.2. Operating process

The overall process is conducted as per the below:

- At the start of the day, Payment banks on DLT manage their ECT liquidity needs in connection with the funds transfers executed in TARGET using their own TARGET RTGS accounts for crediting and receiving funds to and from the NCB escrow account of their own jurisdiction;
- NCBs issue and distribute the same ECT amount received in their Escrow Account to the Payment bank on DLT Dedicated Cash Wallet;
- At the end of the day, the ECT redemption is executed automatically; once finalised, the same burnt ECT amount will be transferred from the NCB escrow account belonging its jurisdiction to the Payment bank on DLT's TARGET RTGS account;
- If several NCBs intervene, each NCB uses its own TARGET escrow account corresponding to the Payment bank on DLT's TARGET RTGS account jurisdiction. Alignments may take place between NCB escrow accounts.

Daily operating hours are detailed in section 3.4.



FUNDING AND DEFUNDING PROCESS IN NET FOR DVP ON DLTS EXAMPLE WITH FRENCH COMMERCIAL BANKS FOR ILLUSTRATION



STEP 1: MINT OF CASH TOKEN BY BDF

STEP 2: CASH LEG SETTLEMENT OF DVP TRANSACTIONS







STEP 3: BURN CASH TOKENS BY BDF AND PROCESS TO NET PAYMENT IN RTGS

In these examples, commercial banks A, B and C are participants of both the RTGS EUR payment system and the Cash DLT platform ("Payment bank on DLT").

3.3. Finality

As exploratory cash token is not central bank money and the Cash DLT is not a system within the meaning of the Finality Directive, the irrevocability of cash payments is defined and realised in central bank money (CeBM) within TARGET.

Final settlement of the cash leg of a DvP transaction is taking place in TARGET and so,

- BdF reflects the burn of exploratory cash tokens done on the Cash DLT platform by the participant using TARGET-BF, in the production RTGS system.
- Other NCBs process the same way with their own RTGS escrow account.

It is to be noted that similarly the securities leg is settled on a Market DLT that is most often not a Securities Settlement System – except for Market DLT being licensed as a CSD. Therefore the final settlement of the cash leg is similarly pending until it is duly registered in the relevant SSS.

For the sake of the exploratory work what is key is:

- The atomicity of the settlement being performed under the HTLC process (see infra)
- And the guarantee under the legal framework that the cash is provided by the NCBs through the escrow accounts and the security is delivered by the Market DLT through the HTLC process and associated contingency procedure and legal enforcement¹¹.

¹¹ See also §3.6 Default management



3.4. Standard DLT Daily Session Hours

Cash DLT will follow the TARGET calendar, the daily session hours (in CET) are to accommodate TARGET operations which have to take place before TARGET cut off.

| Until 9:00 am: | Payment bank on DLTs fund NCBs escrow accounts according to their internal treasury processes Interoperability between Cash DLT and Market DLT is closed |
|---------------------|--|
| 9:00 – 9:59 am: | NCBs get reports detailing TARGET transfers credited on NCBs escrow accounts in D-Day (one TARGET report per NCB). Cash DLT is open - available for NCBs and Payment bank on DLTs Exploratory Cash Tokens' minting is performed and completed Interoperability between Cash DLT and Market DLT is closed |
| 10:00 am – 2:00 pm: | Cash DLT session is up and running – Market DLT is up and running Market DLT processes transactions which trigger ECT payments Interoperability between Cash DLT and Market DLT is opened |
| 2:00 pm – 3:30 pm: | Cash DLT post session – Cash DLT is available for NCBs and Payment bank on DLTs Exploratory Cash Tokens' burning is performed and completed (via cash Sweep) NCBs process alignment between escrow accounts NCB transfers engaged vis-à-vis Payment bank on DLTs' TARGET |
| accounts | Interoperability between Cash DLT and Market DLT is closed |
| 3:30 pm: | Cash DLT cut off – Cash DLT closing and change of business day |

Exceptional requests for early (gross) defunding could be processed during this window assuming:

- That the Payment bank on DLT issuing such request notified its NCB and the BdF operational team at least 48 hours in advance,
- That the ECT redemption request that the participants wish to see reflected on a gross basis in the RTGS occurs no later than 11:00, for defunding to then take place by 12:00.
- BdF and the local NCB of the Payment bank on DLT issuing such a request reserve the right to reject this request in case of capacity constraints limitations and may ask the payment bank on DLT to schedule its trial operation at another point in time or to rely on the regular EoD procedure.

3.5. Illustration

Payment bank on DLTs are TARGET participants and should use the NCB of their jurisdiction as an operational entry point. Each NCB will be in charge of defining with the Payment bank on DLT, the TARGET account structure and overall process for ECT liquidity management. Each NCB will be in charge of monitoring ECT issuance, distribution and redemption in alignment with TARGET transfers.



3.5.1. ECT issuance and redemption high level view (with multiple NCBs)



Step by step description:

According to the daily session hours detailed in the previous section:

- Commercial banks transfer funds to the NCB escrow account of their jurisdiction;
- NCBs mint the corresponding amount of exploratory cash tokens on the commercial banks' Dedicated Cash Wallets;
- According to the account structure and Clients Dedicated Cash Wallet' set up, the ECT amounts are transferred to 1 or n Clients Dedicated Cash Wallets;

The overall ECT distribution is completed, including on clients Dedicated Cash Wallets, amounts are reflected in Clients' and Payment bank on DLTs' balances. The ECT distribution is taking place according to the Client's instructions provided ahead of the daily transactions.

At the end of the daily session:

- NCBs burn all exploratory cash tokens on all commercial banks' Dedicated Cash Wallets including Clients' Dedicated Cash Wallets.
- The NCBs process end-of-day calculation on the daily activity observed on the Cash DLT
- When necessary, NCBs align funds across the NCB escrow accounts
- Each NCB transfers back to the commercial banks RTGS account.



3.5.2. Security Delivery versus ECT Payment (DvP) use case

The below aims at providing an illustration of how transactions such as a DvP could be handled between a seller and a buyer of tokenised securities on a cross-chain execution made via a trustless mechanism set up between both the Cash and the Market DLT. The ECT distribution to Clients is optional.

- **Step 1 Collateralisation**: As TARGET participant, the buyer of tokenised securities transfers fiat euro funds from its TARGET account to the NCB escrow account.
- Step 2 Minting process: As exploratory cash token issuer, NCB mints exploratory cash tokens for an equivalent amount of the euro received in the NCB escrow account and distribute them to the buyer's Dedicated Cash Wallet opened on the cash DLT platform.
- Step 3 DvP: Upon the settlement of atomic transactions¹², the exploratory cash token is debited from the buyer's Dedicated Cash Wallet and credited to the seller's cash wallet. Then (based on the HTLC mechanism), the tokenised securities are transferred from the seller's security wallet to the buyer's securities wallet on the Market DLT platform.
- Step 4 Burning process: Following the seller's request, the exploratory cash tokens are redeemed by the NCB, which instructs the burning of the exploratory cash tokens¹³, and transfers an equal euro amount from its escrow account to the seller's TARGET account. DvP shall be considered as final after the amount's transfer executed in TARGET-RTGS as far as the cash leg is concerned.

In this example:

- The buyer and the seller of the tokenised securities are Payment bank on DLTs on the cash DLT platform and TARGET participants. The buyer and the seller are acting for their own account (no client involved).
- The NCB is the exploratory cash token issuer on the Cash DLT platform and coordinates the collateralisation (funding / defunding mechanism) in TARGET-RTGS vis-à-vis TARGET participants of its jurisdiction.
- Other actors that are not mentioned in this example, are also involved in upstream and downstream of this DvP example such as tokenised security issuer and tokenised security registrar.



¹² Atomic settlement: instant exchange of two assets, such that the transfer of one occurs only upon transfer of the other one (all or nothing settlement). This implies settling transactions on a gross, transaction by transaction basis and by means of a DvP, PvP or DvD procedure. BIS Annual Economic Report, June 2022, Part III, glossary.

¹³ Following Clients' request, the exploratory cash tokens hold on the Clients' Dedicated Cash Wallet are redeemed by its Payment bank on DLT as Dedicated Cash Wallet Custodian.



| | Legend | |
|---|--------|--|
| Dedicated cash acco RTGS participant | unt of | Security Wallet of Security Custodian on Market DLT |
| NCB Escrow account | € | ECT Wallet of Payment bank on DLT |

3.6. Default management

At the time of a default, a participant that has no or not anymore ECT would be subject to the standard TARGET rules without any particular adaptation being necessary¹⁴.

Hence, the only situation to consider is the failure of a participant to the Cash DLT after the issuance and before the redemption of ECTs (i.e. where the participant still has ECTs).

Let's assume a simple situation where the seller transfers securities on a Market DLT in exchange for ECT of the buyer on the Cash DLT, with both participants participating in the same NCB.

If the default occurs before the transaction is completed;

- The non-defaulted participant is informed of the default of its potential counterparty and is not exposed to any risk because there is no transaction:
 - If it is the seller, it simply loses an opportunity to sell its security tokens but still owns them on the Market DLT;
 - If it is the buyer, it still has its ECT.
- The **defaulting participant** has its TARGET account and DL3S Wallet suspended or closed in accordance with the Guideline. The transaction therefore does not take place:
 - if it is the seller, it does not yet have ECT since the transaction does not take place, therefore the standard TARGET rules apply;
 - if it is the buyer, it may be in possession of ECT at the moment of its default (to be answered thereinafter).

It can be concluded that the only situation requiring careful consideration before the transaction deals with a defaulting participant that is a securities buyer still having ECTs at the time of its default.

If the default occurs after the transaction is completed;

- The **non-defaulted participant** is not at risk since:
 - if it is the buyer, it owns the security tokens and no longer has ECT. The default of the counterparty after the transaction takes place has no effect on the buyer;
 - if it is the seller, it already owns the ECTs, there is not risk of no completion of the transaction.
- The **defaulting participant** has already realised the transaction:
 - If it is the buyer, it does not have any more ECT;
 - If it is the seller, it may be in possession of ECT at the moment of its default (to be answered thereinafter).

¹⁴ The risk of default of a TARGET participant is covered by the Guideline. The NCB may or must immediately terminate without prior notice or suspend the participation of a participant especially in insolvency proceedings or default (Article 25, Part 1, Annex I). In such a case, the NCB shall inform without undue delay the participant concerned, the other NCBs and the participants in all TARGET component systems of such suspension or termination. Participants shall bear any losses arising from the submission of a cash transfer order to participants whose participation has been suspended or terminated if such cash transfer order was entered into TARGET after receipt of the message. The NCB shall have a pledge over the participant's existing and future credit balances on its TARGET accounts, whereby collateralizing any current and future claims arising out of the legal relationship between the parties (Article 27, Part 1, Annex I).



It can be concluded that the only situation requiring careful consideration after the transaction deals with a defaulting participant that is a securities seller still having ECTs at the time of its default.

For the NCB involved, the risk is zero since both the buyer and the seller can only have ECTs if an equivalent amount is transferred in the NCBs' escrow account in a mechanism close to prefunding. In the event of a participant's default, all funds' redemption liabilities are therefore guaranteed by the funds that are owned by the NCB.

To sum up, the risk is only for a defaulting participant that would have ECTs in the Cash DLT at the time of its default. All the other actors in the experimentation involved are not exposed to any risk.

The identified risk is contractually framed so that a defaulting participant that would have ECTs in the Cash DLT at the time of its default is guaranteed that the NCB will transfer funds corresponding to its own ECTs to it.

The contracts for the experiment shall provide for the following:

- the escrow account is intended to receive funds corresponding to the total volume of ECTs issued by the NCB on the Cash DLT;
- the NCB expressly acknowledges that the amounts credited to the escrow account are exclusively used to collateralise the NCB's undertaking to return the equivalent in cash of the ECTs held by the participants;
- in the event of a participant's default, if it holds ECTs after its TARGET account has been closed, the NCB shall undertake to transfer by any means the cash equivalent of all ECTs held to the participant in default.

3.7. Entry point during experiments and trials

Where an eligible market participant or eligible market DLT platform operator encounters any issue while using the BdF Full DLT Interoperability during trials or experiments, it will:

- 1. Contact its local NCB describing the issue.
- 2. The local NCB will either
 - i. identify that the issue is not specific to exploratory work and independently affects TARGET Services (e.g. unavailability of RTGS GUI), in which case the regular procedures at L2-L3 shall apply or
 - ii. identify that the issue is specific to the BdF Full DLT Interoperability and notify BdF which shall endeavour to fix it in a timely manner.
- 3. Where BdF cannot address the issue in time (e.g. by the next trial or experiment day), it will communicate to market participants that it cannot provide its solution for that trial or experiment day.
- 4. BdF may extraordinarily terminate the experiments and trials without advance notice in the event of an emergency, which cannot be resolved with reasonable efforts, if continuing could involve
 - i. unacceptable risks to TARGET Services and/or any of the TARGET component systems and/or the new solutions/Solution Provider Central Banks, or
 - ii. serious reputational risk for the Eurosystem, the Solution Provider Central Bank or TARGET services.

In the event of an extraordinary termination of the experiments and trials, eligible market participants and eligible market DLT platform operators may only be informed after such termination has occurred.



4. High level functional description of the Cash DLT solution

The Cash DLT, so called "*Distributed Ledger for Securities Settlement System*" (DL3S), is a DLT architecture provided and operated by Banque de France. It is a private and permissioned DLT built under HyperLedger Fabric protocol. It is designed for allowing interoperability with other Market DLTs built with different technologies. It gives Cash DLT participants the possibility to handle theirs cash positions and payment executions whatever Market DLT business model.

4.1. Cash DLT functions services



The Cash DLT core functions are defined for monitoring liquidity between Cash DLT participants and ensure orderly settlement executions within the below framework:

- ECT management:
 - ECT Issuance, distribution and destruction;
 - ECT Auditability and visibility for supervision;
 - ECT access control according to participant type;
 - ECT Transfer and payment executions.

Reference Data management:

- DLT Participant's set up
- DLT Participant's information storage at wallet level;
- Market DLT data flow access (if any name, type, address, etc.).



Instructions lifecycle monitoring:

- Validate necessary information prior ECT payment thanks to the inter DLT data flow;
- Report instructions status to both counterparties and to the NCB supervisors
- Settlement
 - Ensure cross DLT platforms' settlement thanks to atomic transactions (via the HTLC mechanism)
- Market DLT Interfaces:
 - Provide means to ensure interoperability with Market DLTs and ensure Cross DLT platforms' atomic settlement execution

4.2. Interaction with Target Services

During the exploratory work with the Full DLT Interoperability solution, no automatic process is proposed between the Cash DLT platform and the TARGET Services (TARGET and CLM). The operation procedures detailing TARGET cash transfers triggering ECT distribution between Payment bank on DLT and the NCB of its jurisdiction are specified in Appendix.

4.3. Market DLTs overview and interoperability

The below aims at providing interconnections features with the Market DLT. It remains a high level view, as detailed modus operandi will be specified in an ad hoc document redacted with Market DLT representatives.

We assume that Market DLT key features are:

- Private and permissioned or permissionless¹⁵ DLT infrastructure which interacts with DL3S for transaction settlement and data information sharing (e.g. eligible digital assets or participants);
- Market DLTs operating model consists in securities' listing and registry, transactions triggering
 payments and overall security position management. It will be detailed for each Market DLT
 and will be subject to a dedicated document added in the Service Description appendix.

The interoperability is operated thanks to a trustless mechanism as detailed here under:

- Mechanism types which are time-bound conditional payments, cross networks, that do not require a trusted third party. They allow spending funds after presenting an original secret (secret phrase) before a pre-set timeout;
- Focus on the DVP operation type :
 - DvP instruction is initiated by the Market DLT based on trade information that are legally binding
 - The securities and Cash are settled on an "all or nothing" basis, ECT payment is triggered prior or at the same time of the Security delivery;
 - Should the settlement of any resource fail the whole transaction remains unexecuted; i.e. no Security delivery can take place without ECT payment, and no ECT payment can take place without Security delivery executed;
- The conditions to fulfil for executing ECT payments are :
 - Participants mapping in both networks, a Cash DLT correspondent should be defined for each Market DLT participants and be granted with technical means to get data from each network in a consistent manner. Consequently it is assumed that Securities and Payment bank on DLTs trust each other;

¹⁵ See the eligibility criteria details for Market DLT based on permissionless blockchain



- A consistent definition should be done regarding the hashing and encoding functions between both Cash and Market DLTs.
- Cash DLT trusts the Market DLT who's responsible for the DLT market operation validation and execution;



4.4. Illustration: DvP execution based on HTLC trustless mechanism



The key steps undertaken for executing cross chain DvP are described below:

- 1. The Seller's Securities DLT Custodian locks the securities for a pre-defined Time lock "Ts" and sends the lock information to the Seller's Payment bank on DLT with secret 's';
- 2. The Buyer's Securities DLT Custodian audits the lock of securities
- 3. The Buyer's Securities DLT Custodian informs the Buyer's Payment bank on DLT who locks ECT for a pre-defined Time lock "Tc" (assuming Tc < Ts).
- 4. The Seller's Payment bank on DLT audits the lock of ECT
- 5. The seller's Payment bank on DLT claims the ECT using secret 's' before end of the Time lock "Tc" which reveals secret to the Buyer's Payment bank on DLT
- 6. The Buyer's Payment bank on DLT sends the secret"s" to the buyer's Securities DLT Custodian to claim the securities
- 7. The buyer's Securities DLT Custodian claims securities with secret "s" before end of "Ts"

See detailed flows description available in a separate document (so called "Interaction between Cash and Market DLTs for DvP settlement") provided on demand.

Exception management or which scenarios can lead to DvP non execution:

Assuming that seller and buyer have the right wallet set up on both Cash DLT and on the Market DLT, these are some cases where the settlement of the DvP transaction can fail:

- Seller does not have enough securities on its Securities DLT wallet on the Market DLT;
- Buyer does not have enough ECT on its ECT Dedicated Cash Wallet on the Cash DLT network;
- Seller has enough securities but does not lock them on the Market DLT;
- Buyer has enough ECT but does not lock them on the DL3S DLT.
- Seller does not claim buyer's ECT before expiration of period "T".



For each of the above cases, the trustless mechanism automatically rolls back to the initial situation and **none of the legs** of the DvP transaction are settled.

For the following failure case, a contingency scenario with manual operations could be triggered

Seller claims ECT but Buyer does not claim securities

After an agreed timeout, Market DLT's operator instructs a FoP to send securities to the buyer and thus finalize the DvP transaction.

5. High level technical description of the Cash DLT solution

5.1. Architecture and hosting

The Cash DLT solution hosting is provided on TWISTERX environment (IaaS offer).

Hosting dedicated to experiments:

- IaaS based on the OUTSCALE cloud
- Datacenters based in France
- Not connected to BdF IS

Hosting scenarios for Homologation & Production:

BdF hosting (i.e. BDF hosts all participants nodes)



5.2. Technical interactions with Market DLTs

Exposure of a REST API for message exchanges.

HTTPS communication protocol

- DLT able to implement smart-contract to handle HTLC logic :
 - Asset locking/escrow
 - Asset release on secret disclosure or after the time limit.



6. GLOSSARY:

- Atomic settlement: instant exchange of two assets, such that the transfer of one occurs only upon transfer of the other one (all or nothing settlement). This implies settling transactions on a gross, transaction by transaction basis and by means of a DvP, PvP or DvD procedure. BIS Annual Economic Report, June 2022, Part III, glossary.
- **CoBM**: Commercial Bank Money
- **CeBM**: Central Bank Money
- Dedicated Cash Wallet: Dedicated Cash Wallets owned by the Payment Bank on DLT and are either dedicated to its usage or dedicated to the usage of their clients
- **DLT**: Distributed Ledger Technology
- DL3S: Distributed Ledger for Securities Settlement System Banque de France proprietary DLT platform
- ECT: Exploratory Cash Token
- NCB: National Central Bank(s)
- MTF DLT: Multilateral Trading Facility DLT
- SSS DLT: Securities Settlement System DLT
- TSS DLT: Trading and and Securities Settlement DLT
- **Minting**: process of issuing tokens
- Burning: process of redeeming tokens
- White Listing: process of agreeing the participation of given financial institutions on a DLT
- Private key: a cryptographic component which unlocks the right for its owner to control and use the associated crypto assets
- Public key: a cryptographic component comparable to an address, publicly visible to all users on the network where crypto assets can be transferred or deposited for the benefit of a private key owner



7. APPENDIX

7.1. Cash DLT (DL3S) User Hand Book

| Version | v1.6 |
|---------|------------|
| Date | 07.03.2024 |

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1 Introduction

1.1 Introduction to DL3S

The Banque de France provides services for payment and securities settlement based on Distributed Ledger Technology (DLT), through operating a system called Distributed Ledger Securities Settlement System (DL3S).

DL3S is a full DLT solution designed to allow (i) issuance of tokenised Central Bank (CB) money (*Exploratory Cash Tokens*), that can be transferred using DLT and (ii) its distribution to financial actors registered as participants to DL3S.

DL3S provides a wide range of functionalities meant to be used for various sorts of DLT-based use cases, including liquidity transfers, securities settlement (DvP) for tokenized assets, cross-border payments and cross-currency payments (including cross-border DvP and PvP), while preserving the anchor role of central bank (CB) money.

1.2 Overview of the UHB

1.2.1 General considerations

- General The DL3S User Handbook, hereinafter called UHB, aims at facilitating the use of the User Interface of DL3S (UI). It is intended for any DL3S participant regardless of the focus of its activities and describes the full range of functionalities available in user-to-application (U2A) mode. The UHB provides detailed reference information on all DL3S UI screens and step-by-step instructions for typical use cases.
- TargetThere is only one handbook addressing all DL3S actors: national centralAudiencebanks (NCBs), Commercial banks (acting as payment banks/settlement
banks), clients, securities issuers, etc. By referring to the table of
contents, each reader can easily identify the relevant parts for its
activities.



RelatedThe UHB is part of the functional documentation for DL3S. Among these,
the service description provides a further detailed description of the
business concepts behind DL3S as well as of the various use cases and
functionalities that can be provided by DL3S.
The service description is available on the Banque de France's website
and the UHB is made available to every financial actor that intend to
become a DL3S participant.

Updates Updated versions of the UHB will be provided on an ad-hoc basis following evolutions of the DL3S User Interface.

1.2.2 UHB Methodology

Several symbols and methodological elements are used throughout the DL3S UHB to ease orientation and to help you find relevant information in the most efficient way.

- **Page Layout** Every page in the UHB parts has a similar page layout. You can find four different elements:
 - the header, which shows the chapter and sub-chapter title.
 - the margin column on the left side of each page, which indicates the subject of each paragraph in order to ease the navigation within the document.
 - the text column, which contains the main information, tables and screenshots
 - the footer, which shows the name and the release of the document as well as the page number.
- Links Links are illustrated throughout the UHB with a little triangle followed by a page number within squared brackets. These links help you to jump to related sections by clicking on them or turning to the relevant page.
- Type Set
- Action Business use cases are divided into single action steps. These action steps are numbered sequentially. Intermediate results are described where appropriate and marked with an indented arrow. Each business scenario ends with a final result, indicated by an arrow.

Example:

- 1. Action step 1
- 2. Action step 2
 - Intermediate result
- 3. Action step 3



- Result
- **Screenshots** Screenshots are used to illustrate the corresponding text. Note that there might be minor deviations between the screenshot and your screen appearance, according to your access rights or a specific selection you have made.

Wherever relevant, specific parts of a screenshot are highlighted with a red box. If there is more than one box, position numbers point out the relation to the corresponding description.

1.2.3 UHB Structure

The UHB is structured in five parts which are complemented by annexes.

- Part 1 Part 1 introduces the User Handbook, by presenting shortly the product DL3S and by outlining the functioning and content of the UHB in order to smooth its handling by future DL3S participants.
- **Part 2** Part 2 indicates the various requirements associated with user administration in DL3S, such as registration or set-up. It also outlines the main characteristics of the User Interface, in order for an user to get used to its structure and organization.
- **Part 3** Part 3 presents the general organization of DL3S, aiming at indicate where can be find each kind of information that may be relevant for DL3S participants.
- Part 4 Part 4 provides DL3S participants with series of screenshots in order to detail how to proceed with all relevant use cases in DL3S.
- Part 5 Part 5 is specific to the DL3S Operator role in DL3S and provides the users in charge of the DL3S Operator role with series of screenshots in order to detail how to proceed with specific Operation functionalities.
- Annexes Annexes are composed of a list of all the figures presented throughout the UHB and with a glossary based on DL3S specific vocabulary as well as relevant vocabulary issued from market infrastructures and DLT backgrounds.

2 Overview of the User Interface

2.1 User Administration

To be in capacity to participate in DL3S and once the legal aspects completed, a participant needs to be provided a participation type and roles.

2.1.1 Types of participation description



There are 3 types of participation for the different entities in DL3S:

| Blockchain participant | Description A blockchain participant hosts a node of the network. It hosts the entire DL3S stack, from the HyperLedger Fabrics (HLF) node to the various backend services and the user interface. |
|------------------------|--|
| Direct participant | Description A direct participant doesn't host a node of the network. It is connected through the node of a blockchain participant. Direct participants can interact with the network e.g. send requests, access accounts balances, etc. |
| Indirect participant | Description Indirect participants cannot access the network in any way. Blockchain participants need to provide them access to the network via their own DL3S stack by creating specific users account. |

During the exploratory phase, Banque de France hosts the nodes and each participants receives credentials to connect either from Banque de France or from its payment bank for clients.

Matrix of roles/type of participation:

| Roles | Possible participation type |
|--|--|
| Dedicated Cash Wallet owner | Blockchain participant or Direct participant or Indirect participant |
| Dedicated Cash Wallet manager (reserved to Central Banks) | Blockchain participant mandatory |
| Dedicated Cash Wallet Custodian | Blockchain participant mandatory |
| National CBDC Supervisor (reserved to Central Banks) | Blockchain participant or Direct participant |
| Dedicated Cash Wallet user | Indirect participant mandatory |
| CBDC Supervisor | Blockchain participant or Direct participant |
| CBDC Issuer (reserved to Central Banks) | Blockchain participant or Direct participant |
| DL3S Operator | Blockchain participant |

2.2 Set-up and Login/Logout Procedures

The DL3S Operator provides access rights to the new DL3S user.

Each new user receives:



- A login
- A password

Here is a screenshot of the connexion page with the Banque de France logo and the DL3S logo.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monetary strategy Financial stability | | |
|---------------------------------|------|------------|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | Email * | | | |
| | | Email | | | |
| | | Password * | | | |
| | | Password | | | |

Login

Once the email and the password are filled in, one needs to click on login.

To disconnect, one should click on the disconnection button on the top right corner

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Econom Finandal stability | Calendar date 11-13-2023 15:42:24 Business date 12-31-2022 singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage *2 |
|---------------------------------|------|--|---|
| ⑦ Dashboard | | | |
| Dedicated Cash Wallets | | 2 Dedicated Cash wallets managed | CBDC transfer settled |
| T2 accounts | | | |
| CBDC Operations | | - 0 | , 0€ |
| <u>ពំ</u> Global | | Dedicated Cash wallets owned | Total outstanding amount |
| ក្នំ External network | | | |
| Reporting | | Dedicated Cash Wallets | |
| () Parameters | | OWNED MANAGED | |

2.2.1 Menu Structure

On the left hand side, there is the main DL3S menu. Here is a glimpse of each tab composing this main menu and they will be further detailed along the user handbook:





- Dashboard tab:
 - gives some structured information about total amount values such as the total amount of CBDC outstanding or the number of dedicated cash wallets owned or managed by the participant



- Dedicated Cash Wallets tab:
 - enables to see the details of the dedicated cash wallets owned by the participant if the participant has the role of *Dedicated Cash Wallet Owner*



 enables to see the details of the dedicated cash wallets managed by the participant if the participant has the role of *Dedicated Cash Wallet Manager* or the role of *Dedicated Cash Wallet Custodian*





 enables to see the details of the Dedicated Cash Wallets supervised by the participant if the participant has the role of *National CBDC Supervisor*, the role of *DL3S Operator* or the role of *CBDC Supervisor*



- T2 Accounts tab:
 - Enables to see the details of the T2 accounts references linked to the Dedicated Cash
 Wallets owned by the participant if the participant has the role of *Dedicated Cash Wallet Owner*



 Enables to see the details of the T2 accounts references managed by the participant and links of the T2 account when they exist, if the participant has the role of *Dedicated Cash Wallet Manager*



 Enables to see the details of the T2 accounts references supervised by the participant and links of the T2 account when they exist if the participant has the role of *National CBDC Supervisor*, the role of *DL3S Operator* or the role of *CBDC Supervisor*





- CBDC Operations tab:
 - NB: CBDC Operations refers to CBDC Issuance, CBDC Transfer and CBDC Redemption.
 However, CBDC issuances are only displayed in the *CBDC issued* subtab while CBDC transfers and CBDC redemptions are in the *owned* and *managed* subtab
 - Owned subtab enables to see the details of CBDC transfers and CBDC redemptions a Dedicated Cash Wallet Owner is involved in



Managed subtab enables to see the details of the CBDC transfers and CBDC redemptions executed by the participant with the *Dedicated Cash Wallet Manager* role or the *Dedicated Cash Wallet Custodian* role on the behalf of its clients



 Issued subtab enables to see CBDC issuances executed by the participant with the CBDC Issuer role





• *Supervised subtab* enables to see CBDC transfers and CBDC redemptions supervised by the participant with the *CBDC Supervisor* role.



 National supervised subtab enables to see CBDC transfers and CBDC redemptions supervised in his jurisdiction by the participant with the National CBDC Supervisor role.



• *4 eyes process subtab* enables to see CBDC issuances under the 4 eyes process. This tab is only accessible for the participants with the *CBDC Issuer* role.





- Global tab:
 - Is accessible to every type of *roles* in DL3S but some specificities remain inside the subtabs according to the *roles*. Please refer to the dedicated sections of this user hand book to dig into the specificities.
 - Enables to visualize some lists about NCBs, Participants, Clients and Currencies registered in DL3S.



- External Network tab:
 - Is accessible to every type of *roles* in DL3S but some specificities remain inside the subtabs according to the *roles*. Please refer to the dedicated sections of this user hand book to dig into the specificities.
 - Enables to visualize the external DLT platforms authorised to dialogue with DL3S.
 - o Enables to visualize whitelisted participants and links to an external DLT platform





- Reporting tab:
 - Is accessible only to the roles CBDC Supervisor, National CBDC Supervisor and the DL3S Operator.
 - Enables to visualize CBDC outstanding details in one jurisdiction for the *National CBDC Supervisors.*
 - Enable extraction of CBDC operations and movement history for the *DL3S Operator*, the *National CBDC Supervisors* and the *CBDC Supervisors*.



- User administration tab:
 - o Is accessible only to the roles *DL3S Operator* and *Dedicated Cash Wallet Custodian*
 - Enables to create credentials for a client allowing the client to access to DL3S




- Parameters tab:
 - Business day (visible to every role, editable for *DL3S Operator* only details under section <u>5</u>)
 - Business window (visible to every role, editable for *DL3S Operator* only access rules are described under section <u>3.6</u>)
 - Time lock (visible to every role)



• CBDC full redemption (accessible only to the *DL3S Operator* – details in section 5.1.1)

| BANQUE | DE FRANCE | | | | |
|--------|--|---------------------------------------|----------------------|--|--|
| | Parameters Parameters | | | | |
| | Business Day Business Window Time Lock | 12-31-2022 🖍 Open for All 🖍 240 | | | |
| | | | CBDC full redemption | | |

2.2.2 Top Band Structure

| BANQUE DE FRANCE DL3S | Monetary strategy Economic Financial stability | Calendar date 03-06-2024 11:21:41 Business date 12-31-2022 Business window Open for All | singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (+2) |
|-----------------------|---|---|--|
|-----------------------|---|---|--|

From left to right:

- Banque de France Eurosysteme Logo
- DL3S logo
- Calendar date that corresponds to the current day date
- Business date that corresponds to the date used for operations
- Business window given the current day time (details available under section 3.6)
- User @ participant short name
- The participant's *roles*
- Disconnection button

2.2.3 Screen Types

Screens in read-only:

- Dashboard tab
- Dedicated Cash Wallet Supervised tab
- Dedicated Cash Wallet National Supervised tab
- Dedicated Cash Wallets owned tab if the participant has only a Dedicated Cash Wallet Owner role
- T2 Account National Supervised tab
- Global NCB list
- Global Participants list except for the participants with the Dedicated Cash Wallet Custodian role who can add an Entity and the DL3S Operator who can also add an Entity
- Global Currencies list
- External Network List except for the **DL3S Operator** who can add a new External Network and whitelists participants
- Reporting National CBDC Supervision if the participant has the National CBDC Supervisor role
- Parameters except for the **DL3S Operator**

Screens with actions:



- Dedicated Cash Wallets Managed
- T2 Account Owned tab
- T2 Account Managed tab
- CBDC Operations Owned tab
- CBDC Operations Managed tab
- CBDC Operations Issued tab
- CBDC Operations 4 eyes process only for Issuer role
- Global Participants List only for **Dedicated Cash Wallet Custodian** and **DL3S Operator** who can add Entities
- External Network for the **DL3S Operator**
- External Network List for the **DL3S Operator**
- Reporting Data Extraction
- User administration for the DL3S Operator and Dedicated Cash Wallet Custodian
- Parameters only for the DL3S Operator

3 Structured Information Part

3.1 Dashboard Screen

| E | BANQUE DE FRANCE Eurosystème | DL3S | | Monetary strategy Economic Financial stability | Cale Busi | ndar date 11-13-2023 16:32:21 ness date 12-31-2022 | singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage +2 | r 🆧 |
|---|---------------------------------|------|--------------------------------|---|--------------|---|---|-----|
| Ø | Dashboard | | | | | | | |
| Ó | Dedicated Cash Wallets | | 2 Dedicated Cash wallets ma | inaged | P | 7 CBDC transfer settled | | |
| Ó | T2 accounts | | | | | | | |
| ₽ | CBDC Operations | | - 0 | | 7 | 0€ | | |
| ů | Global | | Dedicated Cash wallets ow | med | | Total outstanding amount | | |
| î | External network | | | | | | | |
| Ø | Reporting | | Dedicated Cash Wallets | | | | | |
| Ø | Parameters | | OWNED MANAGED | | | | | |

- Dedicated Cash Wallet managed corresponds to the number of Dedicated Cash Wallets managed by the participant in the case of a participant having the Dedicated Cash Wallet Manager role and/or the Dedicated Cash Wallet Custodian role
- *Dedicated Cash Wallets owned* corresponds to the number of Dedicated Cash Wallets owned by the participant. This is visible for every participant with *Dedicated Cash Wallet Owner* role
- CBDC operations managed settled corresponds to the number of CBDC operation that have the status "settled" and involving a participant managed by the entity. This is visible for every participant with *Dedicated Cash Wallet Custodian, Dedicated Cash Wallet Manager* or *CBDC Supervisor* role.
- Total outstanding amount corresponds to the total CBDC amount in circulation under the jurisdiction of the participant. This is visible for every participant with *National CBDC Supervisor* and/or *CBDC Supervisor*.



3.2 Global tab

3.2.1 NCB List tab

This tab is accessible by clicking on *Global tab* then *NCB list sub-tab*. *NCB list sub-tab* is a list of NCBs registered in DL3S.

- BIC column is the participant ID in DL3S
- Name column corresponds to the NCB's name
- Country Code column corresponds to the code to identify the NCB jurisdiction country
- Central Bank Code column corresponds to the universal Central Bank Code identifier
- Country Name column corresponds to the name of the country of the NCB
- *Is Participating* column gives the information whether or not the NCB is participating to DL3S platform. A yes in that column means either a level 2 or 3 of NCB participation (see <u>annexe</u>)

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monetary strategy Financial stability | Economic services | | Calendar date 11-13-202 Business date 12-31-202 | 23 16:50:26 singleuser @ O 22 DL3S Operator |
|---------------------------------|------------------------|-----------------------------------|--|----------------------|---------------------|--|--|
| 🕐 Dashboard | National Central Banks | 5 | | | | | |
| Dedicated Cash Wallets | National C | entral Banks | | | | | |
| T2 accounts | | | | | | Filter | Q |
| GBDC Operations | ♦ ВІС | ◆ Name | | 🗢 Country Code | ▼ Central Bank Code | Country Name | |
| ກໍ Global | | Banco de España | | ES | BDE | Spain | no |
| | BDFEFR2TXXX | Banque de France | | FR | BDF | France | yes |
| ាំ External network | | Banca d'Italia | | IT | BDI | Italy | no |
| | | Banco de Portugal | | PT | BDP | Portugal | no |
| Keporting | | Suomen Pankki (Bank of Finland) | | FI | BOF | Finland | no |
| Parameters | | Bank of Greece | | GR | BOG | Greece | no |
| | | Lietuvos Bankas (Bank of Lithuan | ia) | LT | BOL | Lithuania | no |
| | | Banka Slovenije (Bank of Slovenia | a) | SI | BSI | Slovenia | no |
| | | Central Bank of Cyprus | | CY | CBC | Cyprus | no |
| | | Central Bank Consortium | | CS | CBC | Country C | no |
| | | | | | | | |



3.2.2 Participants List tab

3.2.2.1 Description

| BANQUE DE FRANCE EUROSYSTÈME | OUEDEFRANCE DL3S EUROSYSTÈME | | Monetary strategy Economic Financial stability | | Calendar date 11-13-2023 16:40:49 Business date 12-31-2022 | singleuser @ Opera DL3S Operator | |
|---------------------------------|------------------------------------|---------------|---|--------------|---|-------------------------------------|--|
| ⑦ Dashboard | Participants | | | | | | |
| Dedicated Cash Wallets | Participants | | | | bbA | an entity | |
| T2 accounts | | | | | Filter | Q | |
| GBDC Operations | 🗢 Entity ID | ≑ Type | Short Name | Country Code | Roles | | |
| n Global | | | | | Dedicated Cash Wallet Owner | | |
| n External network | BDFEFR2TXXX | BIC | BDF | FR | CBDC Issuer National CBDC Supervisor | | |
| Reporting | CBCONSPPXXX | BIC | NCBISSUER | CS | Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer CBDC Supervisor | | |
| Parameters | CBDEDXXXDLT | BIC | CBD | DX | National CBDC Supervisor | | |
| | CBLXLLXXDLT | BIC | CBL | LL | Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer National CBDC Supervisor | | |
| | OPEREUFFXXX | BIC | OPERATOR | | DL3S Operator | | |
| | PBBILLXXDLT | BIC | PBB | LL | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | | |
| | PBDEDXXXDLT | BIC | PBD | DX | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | | |
| | 00511110/017 | D 10 | 225 | | Destructed Cost Well at Owners | | |

The *Participants List tab* is a list all the participants to DL3S, not only the NCBs.

In that list one can find NCBs, payment banks, custodians or institution.

- *Entity ID* corresponds to the LEI (Legal Entity Identifier) number or the BIC (Bank Identifier Code) number
- *Type* mentions whether the Entity ID is an LEI or a BIC
- Short Name is the short name of the participant in DL3S
- Country Code is the jurisdiction code of the participant in DL3S
- Roles corresponds to the participant's role in DL3S
- *The Add Entity* button is used to add new entity to DL3S. It is only accessible to a participant with *DL3S Operator* role.

3.2.2.2 Adding a new entity

| | Monetary strategy | Calendar date 02-08-2024 15:11:07 sime | rleuser @ Operato |
|----------------------------|---|--|-------------------|
| EUROSYSTÈME | DL3S Financial stability | Business date 02-12-2024 DL3 | S Operator 🕹 |
| ② Dashboard | Participants > New Entity | | |
| Dedicated Cash Wallets | New Entity | | |
| T2 accounts | INFOS Valid Fro | m * 🔹 Valid To 🔹 | |
| CBDC Operations | Entity ID * NCB responsible Type * Name * | | |
| fi Global | Rales * | | |
| | | | |
| <u>íi</u> External network | * Remitred Field | | |
| Reporting | | | |
| Parameters | CANCEL SUBMIT | | |

Only **DL3S Operator** can add a new participant by filling in:

- Its Entity ID either an LEI or a BIC



- Its NCB responsible
- Type is either LEI or BIC
- *Name* is the participant name in DL3S.
- *Roles* is the participant role in DL3S. It can be a *CBDC Issuer, DCW Owner, DCW Manager, DCW Custodian, CBDC Supervisor, National CBDC Supervisor.*
- *Valid From,* the beginning of the participant validity date
- Valid to, the end of the participant validity date (not mandatory)

3.2.3 Client List tab

3.2.3.1 Description

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financia stabil | Economic services | Calendar date 11-13 Business date 12-31 | 2023 16:41:33 singleuser @ PBS Dedicated Cash Wallet Owner 2 -2022 Dedicated Cash Wallet Custodian |
|---------------------------------|-------------------------|--|----------------------|--|---|
| 🕐 Dashboard | Clients | | | | |
| Dedicated Cash Wallets | Clients | | | | Add a client |
| 🗂 T2 accounts | | | | Filt | er Q |
| BCBDC Operations | | A T | | Country Code | |
| n Global | 00CLI1PBSINVESTOR000001 | LEI | PBS-CLI1 | | Dedicated Cash Wallet User |
| n External network | 00CLI2PBSINVESTOR000002 | LEI | PBS-CLI2 | | Dedicated Cash Wallet User |

The *Clients List tab* is only accessible to *DL3S Operator* and *Dedicated Cash Wallet Custodian*. For a *Dedicated Cash Wallet Custodian*, it gives access to the list of its clients. For *DL3S Operator*, it gives access to the list of all the clients registered.

In that list one can find:

- *Entity ID* corresponds to the LEI (Legal Entity Identifier) number or the BIC (Bank Identifier Code) number
- *Type* mentions whether the Entity ID is an LEI or a BIC
- Short Name is the short name of the participant in DL3S
- Country Code is the jurisdiction code of the participant in DL3S
- Roles corresponds to the participant's role in DL3S
- *The Add Client* button is used to add new client to DL3S. It is only accessible to a participant with *DL3S Operator* role or *Dedicated Cash Wallet Custodian* role.



3.2.3.2 Adding a new client

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability | Calendar date 02-08-2024 11 Business date 02-08-2024 | :04:03 singleuser @ PBG Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian |
|---------------------------------|-----------------------------|--|---|---|
| ⑦ Dashboard | <u>Clients</u> > New Client | | | |
| Dedicated Cash Wallets | New Client | | | |
| 🔂 T2 accounts | INFOS | | Valid From * | Valid To |
| BCBDC Operations | Client ID * | Type * | Name * | |
| <u>ກໍ</u> Global | Roles * | | | |
| រំ External network | | | | |
| 꼸 User administration | * Required Field | | | |
| Parameters | CANCEL | | | |
| | | | | |
| | | | | |

Only Dedicated Cash Wallet Custodian can add a new client by filling in:

- Its Entity ID either an LEI or a BIC
- *Type* is either LEI or BIC
- *Name* is the participant name in DL3S.
- *Roles* is the participant role in DL3S. It can only be a *Dedicated Cash Wallet User* for now.
- Valid From, the beginning of the client validity date
- Valid to, the end of the client validity date (not mandatory)

3.2.3.3 Currencies List

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Mo strat | etegy Economic Financial stability | Calendar date 02 Business date 02 | 2-08-2024 11:06:11 2-08-2024 | singleuser @ Operator DL3S Operator & |
|---------------------------------|--------------|---------------|---|--------------------------------------|---------------------------------|--|
| ⑦ Dashboard | Currencies | | | | | |
| Dedicated Cash Wallets | Active Curre | ncies | | | Add a currency | Inactive |
| 🗂 T2 accounts | 🗢 Short Name | ⇔ Name | Symbol | Valid From | Valid To | |
| B CBDC Operations | EUR | Euro | € | 01-01-2022 🖍 | 1 | |
| ាំ Global | | | | | | |
| ក្នំ External network | | | | | | |
| ⊘ Reporting | | | | | | |
| () Parameters | | | | | | |

The currencies list tab gives the list of currencies used in DL3S.

Only the *DL3S Operator* has the *Add a currency* button.



3.3 External Network

3.3.1 Network List

3.3.1.1 Description

| B/ | ANQUE DE FRANCE Eurosystème | DL3S | | | Monetary strategy Financial stability | Economic services | Calendar date Business date | 02-08-2024 10:38:0 02-07-2024 | 6 singleuser @ DL3S Operator | Operator |
|----|--------------------------------|----------|-----------|--------------|--|----------------------|--------------------------------|----------------------------------|---------------------------------|----------|
| Ø | Dashboard | Networks | | | | | | | | |
| Ó | Dedicated Cash Wallets | Active | e Network | S | | | | Add a network | Inactive | |
| G | T2 accounts | Netwo | ork ID | Network Name | | Owner Name | Valid From | Valid To | | |
| ₽ | CBDC Operations | Marke | tDLT1 | Market DLT 1 | | Market DLT Owner 1 | 01-01-2022 🧪 | - | | |
| ñ | Global | mariar | nne_dl3s | DL3S | | BDF | 01-01-2022 🧪 | | | |
| ů | External network | | | | | | | | | |
| Ø | Reporting | | | | | | | | | |
| 0 | Parameters | | | | | | | | | |

- The *Network List tab* gives the list of external networks registered in DL3S.
- The *Add a network* button on top right corner enables to register a new external network to DL3S.
- Only the DL3S Operator role have this button and can add a new external network

3.3.1.2 Adding a new external network

| В | ANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability Economic services | Calendar date 02 Business date 02 | 2-08-2024 10:32:53 -07-2024 | singleuser @ Ope DL3S Operator 온x | erator |
|---|--------------------------------|-------------------------------|--|--------------------------------------|--------------------------------|--------------------------------------|--------|
| Ø | Dashboard | <u>Networks</u> > New network | | | | | |
| Ó | Dedicated Cash Wallets | New network | | | | | |
| Ó | T2 accounts | INFOS | | Valid From * | Valid To | | |
| ₽ | CBDC Operations | Network ID * | Network Name * | Owner Name * | | | |
| ů | Global | * Required Field | | | | | |
| ů | External network | CANCEL SUBMIT | | | | | |
| Ø | Reporting | | | | | | |
| Ø | Parameters | | | | | | |

The DL3S Operator has to fill in the:

- *Network ID*, ID of the new external network in DL3S
- Network Name, the name of the new external network in DL3S
- *Owner Name*, the name of the owner of the market DLT (or network). It does not have to be an already-registered to DL3S participant
- Valid From, the beginning of the network validity date
- Valid to, the end of the network validity date (not mandatory)



3.3.2 External Network Whitelists

3.3.2.1 Description

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | S | Monetary trategy Financial stability | mic | Calendar date 02-08-202 Business date 02-08-202 | 24 10:46:41 singleuser @ Operator 24 DL3S Operator $\stackrel{\circ}{\simeq}_{\mathbf{x}}$ |
|---------------------------------|-------------|-------------|---|-----------|--|---|
| ⑦ Dashboard | Whitelists | | | | | |
| Dedicated Cash Wallets | Whitelists | | | | Add a | whitelist |
| 🗂 T2 accounts | 🗢 Entity ID | Manager ID | Network | Add links | Valid From | Valid To |
| CBDC Operations | PBGSGGXXDLT | PBGSGGXXDLT | MarketDLT1 | i | 02-06-2024 🖍 | ř |
| n Global | PBGSGGXXDLT | BDFEFR2TXXX | MarketDLT1 | ř | 02-08-2024 🖍 | 02-20-2024 🧪 |
| n External network | PBBILLXXDLT | CBLXLLXXDLT | MarketDLT1 | i | 02-06-2024 🧪 | 02-19-2024 🖍 |
| ⑦ Reporting | | | | | | |
| Parameters | | | | | | |

The *External Network Whitelists* tab shows the participants in DL3S whitelisted to exchange with external networks. If there is no participant whitelisted yet, "No data available" message displays.

- Entity ID column is the participant ID in DL3S
- Manager ID column is manager ID of the entity ID in DL3S
- Network column is the market DLT (or network) name whitelist for the entity in DL3S
- Valid From, the beginning of the whitelist validity date
- Valid to, the end of the whitelist validity date (not mandatory)

3.3.2.2 Adding a whitelist

The *Add a whitelist* button on the top right corner exists only for the *DL3S Operator* role. It allows to whitelist DL3S's participants with external networks. Only the *DL3S Operator* can whitelist DL3S participants with external networks.

| В | ANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary stategy Economic Financial stability Services | Calendar date 0 Business date 0 | 2-08-2024 10:52:31 2-08-2024 | singleuser @ Operate | or: |
|--------|--------------------------------|----------------------------|---|------------------------------------|---------------------------------|----------------------|-----|
| Ø | Dashboard | Whitelists > New whitelist | | | | | |
| | Dedicated Cash Wallets | INFOS | | Valid From * | Valid To | | |
| í J | T2 accounts CBDC Operations | Entity ID * | Manager ID * | | | | |
| ň | Global | * Required Field | | | | | |
| ů | External network | CANCEL SUBMIT | | | | | |
| Ø | Reporting | | | | | | |
| Ø | Parameters | | | | | | |

The **DL3S Operator** needs to fill in the *Entity ID* of DL3S participant and the *Manager ID* of the participant and the Valid from date (valid to date is not mandatory).



Next, the **DL3S Operator** needs to link the whitelisted participant with the correct external network by clicking on the little pen and filling for the right external network.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | 3S | | Monetary strategy Financial stability | | 4 10:54:40 singleuser @ O 4 DL3S Operator |)perator ଝିx |
|---------------------------------|--------------------------------------|--------------|------------------------|--|---|--|-----------------|
| ⑦ Dashboard | Whitelists | | | | | | |
| Dedicated Cash Wallets | Whitelists | | | | Add a v | Inactive | |
| 🗂 T2 accounts | Entity ID | ✦ Manager ID | Network | Add links | Valid From | Valid To | |
| BCBDC Operations | PBBILLXXDLT | CBLXLLXXDLT | MarketDLT1 | 1 | 02-06-2024 🧪 | 02-19-2024 🧪 | |
| n Global | PBGSGGXXDLT | BDFEFR2TXXX | MarketDLT1 | 1 | 02-08-2024 🖍 | 02-20-2024 🧪 | |
| n External network | PBGSGGXXDLT | PBGSGGXXDLT | MarketDLT1 | 1 | 02-06-2024 🧨 | i | |
| Reporting | | | | | | | |
| Parameters | | | | | | | |
| | | | Monetary | | | | |
| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Financial stability | nic | Calendar date 02-08-202 Business date 02-08-2024 | 4 10:55:50 singleuser @ O 4 DL3S Operator 2 | erator ≤x |
| 🕐 Dashboard | <u>Whitelists</u> > Update whitelist | | | | | | |
| Dedicated Cash Wallets | Update whitel | ist | | | | | |
| T2 accounts | INFOS | | | | | | |
| CBDC Operations | Entity ID * | | Manager ID * | | | | |
| ក្នំ Global | | | | | | | |
| n External network | Links | | | | | | |
| Peporting | Network Market DLT 1 | ~ | | | | | |
| Parameters | * Required Field | | | | | | |
| | CANCEL | т | | | | | |
| | | | | | | | |

3.4 Reporting

3.4.1 National CBDC Supervision

This tab is used for CBDC supervision and is available only for *National CBDC Supervisors* role.

| CBDC supervision | | | |
|-------------------------------------|-------------|---------------|-----------------------|
| Currency Euro • | | | |
| Participant | Total owned | Total clients | Total owned + clients |
| PBSOFRXXDLT (11-20-2023 10:24:06) | 1 000 | 0 | 1 000 |
| PBGSGGXXDLT (11-20-2023 10:24:06) | 0 | 0 | 0 |
| Total | 1 000 | 0 | 1 000 |



On this tab, a *National CBDC Supervisor* can control three types of total values:

- *Participant* column corresponds to the DL3S participants supervised by the actual *National CBDC Supervisor*
- *Total Owned* column corresponds the total CBDC amount owned by the DL3S participants under the NCB jurisdiction
- *Total Clients* is the total CBDC amount owned by clients of the DL3S participant under the NCB jurisdiction
- *Total Owned + Clients* is the total CBDC amount owned by the DL3S participants and its clients. It must be equal to total amount outstanding of the *National CBDC Supervisor* dashboard.



3.4.2 CBDC Operations extractions and Movement history extraction

This tab is only accessible to *National CBDC Supervisor* or *DL3S Operator*.

Extractions are described in section 4.7.

3.5 User administration

3.5.1 Description

The user administration tab is available for every **Dedicated Cash Wallet Custodian** and for **DL3S Operator**. It enables the creation of credentials for any new participant. **Dedicated Cash Wallet Custodian** can add a new user for their new clients only. **DL3S Operator** can add a new user for any participant of DL3S platform.



3.5.2 Adding a new user

| <u>Users</u> > New User | |
|-------------------------|----------------------------------|
| New User | |
| IDENTIFICATION | |
| User Email * | Password * |
| USER INFORMATION | |
| Username * | Access Type Entity * PESOFROXOLT |
| * Required Field | |

For adding a new user to a participant, one has to fill in:

- User Email that will correspond to the email of the user
- *Password* that will be associated to the email and that will enabling to connect to DL3S platform
- *Username* corresponds to the name that will be displayed in the UI on the top right of the dashboard to identify the user created
- Access Type corresponds to the capability of the user to create user itself or not. Choosing "Access Administrator" grants them user creation rights.
- *Entity* is the BIC or the LEI of the BIC within which the user will be integrated

3.6 Business Day management

Similarly to Target services, we've introduced a business day management under DL3S platform. To do so, we've first defined different time slots (windows hereafter) through the day with specific rules in terms of access and actions permitted by each DL3S roles as listed below. The change of business window is automatic under DL3S.

1st Window (e.g. 9:00-9:59) "Start of Day"

- All DCW Managers, Owners, Custodians and Users can connect to the platform and instruct CBDC Operations.
- Market DLTs cannot connect to DL3.
- No transactions (other than CBDC operations) can be instructed.

2nd Window (e.g. 10:00-13:59) "Open for All"

- All participants can access DL3S and instruct CBDC Operations.
- Market DLTs can connect to DL3S and trigger DvP settlements.

3rd Window (e.g. 14:00-15:30) "End of Day"

• The only permitted operation is cash sweep by the Operator.



- No intra or cross platform operation is allowed.
- Ongoing operations must be settled before the cash sweep is triggered.
- The business date can be updated by DL3S Operators after the successful cash sweep process

4th Window (e.g. 15:30-8:59 D+1) "Closed"

- DL3S is not open.
- Only the Operator can access the platform.

| | Operator | NCB | | Other participants | | Market DLTs | |
|----------------|----------|-------|------|--------------------|------|-------------|-----|
| Liquidity Only | Y | Login | CBDC | Login | CBDC | Login* | DvP |
| | | Y | Y | Y | Y | N | N |
| All | Y | Login | CBDC | Login | CBDC | Login | DvP |
| | | Y | Y | Y | Y | Y | Y |
| End of Day | Y | Login | CBDC | Login | CBDC | Login | DvP |
| | | Y | N | Y | N | N | N |
| Closed | Y | Login | CBDC | Login | CBDC | Login* | DvP |
| | | N | N | N | N | N | N |

The table below summarize the access and action management depending on the window considered:

Only DL3S Operators have access to the business windows setup. This will be described under section 5.

The business date update and the CBDC full redemption are enabled only during the End of Day window.

4 Description of Use Cases

Disclaimer: Please be aware that at this stage of development, cantonment by jurisdiction is not implemented. It is therefore currently technically possible for a central bank to create a Dedicated Cash Wallet outside its jurisdiction or to issue on a Dedicated Cash Wallet outside its jurisdiction. Be careful to respect your jurisdiction.

4.1 Dedicated Cash Wallet management

4.1.1 Dedicated Cash Wallet creation by a Dedicated Cash Wallet Manager

Only a *Dedicated Cash Wallet Manager* can create Dedicated Cash Wallets for *Dedicated Cash Wallet Owners* he manages. Thus, one needs to connect as a participant with *Dedicated Cash Wallet manager* role.



To create a Dedicated Cash Wallet, a *Dedicated Cash Wallet manager* needs at first to create the T2 account that will be linked to the new Dedicated Cash Wallet

4.1.1.1 T2 account creation and link

- Click on *T2 Accounts – managed tab* and click on *Create a T2 Account* button on the top right corner

| BANQUE DE FRANCE Eurosystème | DL3S | Monet strategy Fina s | ary Economic services tability | Calendar Business o | date 02-08-2024 14:24:52 date 02-12-2024 | singleuser @ CBL Dedicated Cash Wallet Own Dedicated Cash Wallet Mana +2 | er ager 🖧 |
|---------------------------------|----------------------|--------------------------------|---|------------------------|---|---|--------------|
| 🕐 Dashboard | T2 Accounts | | | | | | |
| Dedicated Cash Wallets | T2 Accounts - n | nanaged | | | Create a T2 A | Inactive | |
| T2 accounts | T2 Account Reference | Country Code | Valid From | Valid To | Links | Add links | |
| 0 | FRT2PBB001 | LL | 01-16-2024 🧪 | 1 | PBBILLXXDLT | 1 | |
| CBDC Operations | FRT2PBE001 | ш | 01-16-2024 🧪 | / | PBEILLXXDLT | 1 | |
| ក្នំ Global | | | | | | | |
| <u>ព</u> ំ External network | | | | | | | |
| Reporting | | | | | | | |
| Parameters | | | | | | | |

- Fill in the following fields with T2 Account Reference and the related NCB, the Valid from date and valid To date (not mandatory).

| В | ANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability | Calendar date 02-08-2024 Business date 02-12-2024 | 14:25:33 | singleuser @ CBL Dedicated Cash Wallet Owne Dedicated Cash Wallet Mana (+2) | er iger 🖧 |
|---|--------------------------------|--------------------------------------|--|--|----------|--|--------------|
| Ø | Dashboard | T2 Accounts > New T2 Account | | | | | |
| Ó | Dedicated Cash Wallets | New T2 Account | | | | | |
| 6 | T2 accounts | PERIMETER | | 2/13/2024 | Valid Te | | |
| ₽ | CBDC Operations | T2 Account reference * FRT2PBB002 | NCB * | × | | | |
| ñ | Global | | | | | | |
| ň | External network | CANCEL SUBMIT | | | | | |
| Ø | Reporting | | | | | | |
| 0 | Parameters | | | | | | |

- The newly created wallet now appears in the list *Inactive T2 accounts – managed* tab list. It is needed to link it to the participant. Once the Valid from date is reached, the T2 account reference becomes valid and appears on *Dedicated Cash Wallets –managed* tab.



| DL3S | | Monetary strategy Financial stability | Economic services | Calendar date Business date | 02-08-2024 14:27:05 02-12-2024 | singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manag +2 | jer 2x |
|---|--------------|--|---|--|--|--|---|
| <u>T2 Accounts</u> > Inactive T2 Ac Inactive T2 Ac | ccounts | anaged | | | | | |
| ◆ T2 Account Reference FRT2PBB002 | Country Code | Valid From 02-13-2024 🖍 | Valid To | Links | Add links | Last update 02-08-2024 14:26:39 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | DL3S | DL3S | DL3S TAccounts > Inactive T2 Accounts Inactive T2 Accounts - managed Inactive T2 Accounts - managed Inactive T2 Accounts - managed Image: managed Image: managed Image: managed | DL3S Burger Stranger TAccounts > Inactive T2 Accounts S Bactive T2 Accounts S - managed ↓ 12 Account Reference ↓ Country Code ↓ Valid From ↓ Valid To FRT2PBB002 LL 02:13:2024 ↓ ↓ | DL3S Moregray Rearced stream Economic works Calendar date Business date T2Accounts > Inactive T2 Accounts Enactive T2 Accounts - managed | Calendar date 0.20-2024 14/2.705 Business date 0.2-12-2024 Calendar date 0.2-12-2024 Business date 0.2-12-2024 Calendar date 0.2-12-2024 Business date 0.2-12-2024 Calendar date 0.2-13-2024 Calendar date 0.2-13-2024 Calendar date 0.2-13-2024 Calendar date 0.2-13-2024 | DL3S Longment with the second ment with the se |

- Click on the pencil in the add links column.
- Click on "+" on the right and link T2 account reference to the right entity by selecting the correct entity in dropdown menu.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability | Calendar date 02-08-2024 14:27:38 Business date 02-12-2024 | singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (+2) | & |
|---------------------------------|---------------------------------------|--|---|--|---|
| ⑦ Dashboard | T2 Accounts > Add links to T2 Account | | | | |
| Dedicated Cash Wallets | Add links to T2 Account | | | | |
| T2 accounts | PERIMETER | | | | |
| B CBDC Operations | T2 Account reference * FRT2PBB002 | NCB * | ~ | | |
| ក្នំ Global | | | | | |
| ្បំ External network | Links | | | + | |
| ⑦ Reporting | Entity | | | | |
| Parameters | PBB | X | | | |
| | CANCEL | | | | |

• T2 account-managed tab contains now every information concerning the T2 account managed by the participant

| B | ANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financial stability | Economic services | Calendar date Business date | 02-08-2024 14:29:40 02-12-2024 | singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage +2 | r 🖧 |
|---|--------------------------------|--------------------------------|------------------------------|--------------|--|----------------------|--------------------------------|-----------------------------------|---|-----|
| Ø | Dashboard | | T2 Accounts > Inactive T2 Ac | counts | _ | | | | | |
| G | Dedicated Cash Wallets | Inactive T2 Accounts - managed | | | | | | | | |
| | | | T2 Account Reference | Country Code | Valid From | Valid To | Links | Add links | Last update | |
| Ó | T2 accounts | | FRT2PBB002 | LL | 02-13-2024 🖍 | 1 | PBBILLXXDLT | 1 | 02-08-2024 14:26:39 | |
| ₽ | CBDC Operations | | | | | | | | | |
| ů | Global | | | | | | | | | |
| ñ | External network | | | | | | | | | |
| Ø | Reporting | | | | | | | | | |
| | Parameters | | | | | | | | | |

- *T2 Account Reference* column corresponds to the reference of the account in Target 2
- Country Code column corresponds to the jurisdiction code of the participant in DL3S
- Links corresponds to the entity's BIC linked to the T2 account



_

- Valid From corresponds to the beginning of validity of the T2 account
- Valid To corresponds to the end of validity of the T2 account
- Several entities can be linked to the same T2 account

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetar strategy Financ stat | y Economic services | Calendar date 02-08-2024 11:18:02 Business date 02-09-2024 | | singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manag +2 | |
|---------------------------------|----------------------|---------------------------------------|---------------------------|---|----------------------------|--|--|
| 🕐 Dashboard | T2 Accounts | | | | | | |
| Dedicated Cash Wallets | T2 Accounts - ma | anaged | | | Create a T2 A | Account Inactive | |
| T2 accounts | T2 Account Reference | 🗢 Country Code | Valid From | Valid To | Links | Add links | |
| | FRT2PBD001 | DX | 01-16-2024 🧪 | 1 | PBDEDXXXDLT | 1 | |
| GBDC Operations | FRT2PBG001 | FR | 01-16-2024 🧪 | 1 | PBGSGGXXDLT | 1 | |
| ក្នំ Global | FRT2PBR001 | NN | 01-16-2024 🧪 | 1 | PBRBNNXXDLT | 1 | |
| n External network | FRT2PBS001 | FR | 01-16-2024 🧪 | 1 | PBSOFRXXDLT | 1 | |
| (?) Reporting | FRT2PBS002 updated | FR | 02-09-2024 🖍 | 1 | PBRBNNXXDLT PBSOFRXXDLT | 1 | |
| ্যি Parameters | | | | | | | |

4.1.1.2 Creation of a Dedicated Cash Wallet

Once the T2 account is created, the *Dedicated Cash Wallet manager* can create the Dedicated Cash Wallet.

- Click on *Dedicated Cash Wallets – managed tab* and click on *Create a Dedicated Cash Wallet* button on the top right corner

| BA | EUROSYSTÈME | DL3S | Monetary strategy Economic Financial stability services | | Calendar date 02-08-2024 14:31:15 Business date 02-12-2024 | | singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage (+2) | |
|----|---------------------------|--|--|----------------|---|---------------------|---|--|
| Ø | Dashboard | Dedicated Cash Wallets | | | | | | |
| Ó | Dedicated Cash Wallets | Dedicated Cash Wallets - | managed | | Create a D | edicated Cash wal | Inactive | |
| Ó | T2 accounts | | Stand | ard Issuance | | | | |
| ₽ | CBDC Operations | Wallet ID | ✦ T2 Account Reference | ◆ Wallet Alias | ♦ Owner BIC | Owner Short Name | t Currency | |
| ň | Global | uA2ZY6CyFjGY84jtcOcPf4nUFZW4ZMKJ+3GCR | bXL8Kk= FRT2PBB001 | PBB_WALLET | PBBILLXXDLT | PBB | EUR | |
| ñ | External network | /d9UWivhNCgQhbkAes9JkrrzmOrpVr/4xArTM/ | A7Bblo= FRT2PBE001 | PBE_WALLET | PBEILLXXDLT | PBE | EUR | |
| Ø | Reporting | 4 | | | | | Þ | |
| | | | | | | | | |

- Fill in for the following fields:



| В | ANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability | | Calendar date 02-08 Business date 02-12 | 3-2024 14:31 2-2024 | 1:46 D D O | ingleuser @ CBL redicated Cash Wallet Owner redicated Cash Wallet Manage +2 | er & |
|---|--------------------------------|--|--|-----------------|--|------------------------|------------------|--|------|
| Ø | Dashboard | Dedicated Cash Wallets > New Dedic | ated Cash Wallet | | | | | | |
| G | Dedicated Cash Wallets | New Dedicated Ca | ish Wallet | | | | | | |
| 6 | T2 accounts | PERIMETER | | | 2/13/2024 | | Valid To | Ē | |
| ₽ | CBDC Operations | Dedicated Cash Wallet Type * Standard O Issuance | Dedicated Cash Wallet Alias * PBB_WALLET_002 | Client N PBB | ame * | | | | |
| ñ | Global | | | | | | | | |
| ñ | External network | Currency * | T2 Account reference * FRT2PBB002 | | ~ | | | | |
| Ø | Reporting | | | | | | | | |
| 0 | Parameters | CANCEL | | | | | | | |

- Pay attention *Dedicated Cash Wallet Type Standard* is checked unless it is an issuance wallet which is created
- Dedicated Cash Wallet Alias is usually Short Name_WALLET_001. The DCW alias can only contain alphanumeric characters, hyphen and underscore. If the DCW alias is filled with another special character, an error message will appear and prevent the submission of the request.
- Client Name has to be filled in with the short name of the participant. The short name appears in the global tab Participant List sub tab
- Choose the *currency* for the wallet
- Choose the right *T2 account reference* to link to the wallet to
- Choose a valid from date starting from which the wallet is valid
- Valid To date is not mandatory
- The newly created Dedicated Cash Wallet now appears in *Inactive Dedicated Cash Wallets managed* tab. Once the Valid from date is reached, the dedicated cash wallet becomes valid and appears on *Dedicated Cash Wallets* –*managed* tab.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monet: strategy Finar st | ary ncial tability | Economic rvices | Calend Busine | ar date 11-20-2023 ss date 12-31-2022 | A new wal created | let was successfully |
|---------------------------------|------------------------|-------------------------|-----------------------------------|--------------------------|--------------------|------------------|--|-------------------------|----------------------|
| 🕐 Dashboard | Dedicated Cash Wallets | | | | | | | | |
| Dedicated Cash Wallets | ✓ The Dedicated Cash | wallet PBG_WALLI | ET_002 has been created | successfully | | | | | |
| T2 accounts | Dedicated Ca | ash Walle | ts - manageo | k | | | | Create a Dedicated Cash | wallet |
| BDC Operations | | | U | | | | | | |
| n Global | | | | Standa | ard Issuance | | | | |
| n External network | Wallet ID | | ◆ Wallet Alias | ♦ Owner BIC | ♦ Owner Name | ♦ Currency | ♦ Available | ♦ Country Code | Token |
| Reporting | PBG_WALLET_001 | Reference FRT2PBG001 | PBG_WALLET_001 | PBGSGGXXDLT | PBG | EUR | | FR | See De |
| Parameters | PBG_WALLET_002 | FRT2PBG001 | PBG_WALLET_002 | PBGSGGXXDLT | PBG | EUR | | FR | See De |
| | PBS_WALLET_001 | FRT2PBS001 | PBS_WALLET_001 | PBSOFRXXDLT | PBS client | EUR | 1 000 | FR | See De |
| | | | | | | | | | • |



| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Ec Financial stability Servi | onomic ices B | alendar date 02-08-2 usiness date 02-12-2 | 024 14:35:06 De 024 De •••••••••••••••••••••••••••••••••••• | ngleuser @ CBL dicated Cash Wallet Owner dicated Cash Wallet Manager |
|---|---|---|------------------|--|---|--|
| ⑦ Dashboard | Dedicated Cash Wallets > Inactive Dedicated C | Cash Wallets | | | | |
| Dedicated Cash Wallets | Inactive Dedicated Cas | sh Wallets - mana | rd Issuance | | | |
| T2 accounts | | | | | | |
| BDC Operations | Wallet ID | T2 Account Reference | ♦ Wallet Alias | Owner BIC | Owner Name | Country Code |
| Ep cope operations | | | | | 000 | |
| i Global | qP4y9IJI8sAfRjqSxKnWQ8/rNUrq2E47CcU | IgvaE73X0= FRT2PBB002 | PBB_WALLET_002 | PBBILLXXDLT | client | LL |
| n Global | qP4y9IJI8sAfRjq5xKnWQ8/rNUrq2E47CcL | IgvaE73X0= FRT2PBB002 | PBB_WALLET_002 | PBBILLXXDLT | client | LL , |
| fi Global fi External network | qP4y9IJI8sAfRjqSxKnWQ8/rNUrq2E47CcL | gvaE73X0= FRT2P8B002 | PBB_WALLET_002 | PBBILLXXDLT | PDD client | , |

- Wallet ID column corresponds to the technical identity of the wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the wallet on DL3S platform
- Owner BIC corresponds to the BIC of the owner of the wallet
- Owner Name corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S
- Currency corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the wallet. At first, when the wallet is empty, it contains no data.
- Valid From, the beginning of the wallet validity date
- *Valid to,* the end of the wallet validity date

4.1.2 Dedicated Cash Wallet creation by a Dedicated Cash Wallet Custodian

A **Dedicated Cash Wallet custodian** can create a Dedicated Cash Wallet that will be used by one of its clients. Before creating a Dedicated Cash Wallet, the **Dedicated Cash Wallet Custodian** must have added its client to DL3S (see <u>3.2.3.2</u>) and create a user for him (see <u>3.5.2</u>).

- Connect as a *Dedicated Cash Wallet custodian*
- Make sure a T2 account is owned by the custodian, elsewhere the **Dedicated Cash Wallet manager** of the custodian has to link its T2 account to the custodian (see <u>4.1.1.1</u>)
- Click on the Create a Dedicated Cash Wallet button in the Dedicated Cash Wallet-managed tab

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | strategy Stategy | cial bility | Economic | | Calendar Business | date 11-20-2023 11:08:24 date 12-31-2022 | singleuser @ PBS Dedicated Cash Wallet C Dedicated Cash Wallet C |
|---------------------------------|------------------------|----------------------|---------------------|----------------|--------------|------------|----------------------|---|--|
| Ø Dashboard | Dedicated Cash Wallets | | | | | | | | |
| Dedicated Cash Wallets | Dedicated Ca | ish Wallets - mar | naged | | | | | Create a De | dicated Cash wallet |
| T2 accounts | | | | Standa | rd lesuance | | | | |
| CBDC Operations | | | | Stanua | TU ISSUAIICE | | | | |
| <u>n</u> Global | Wallet ID | T2 Account Reference | Wallet Alias | Manager BIC | Manager Name | ♦ Currency | Available | Country Code | Token Details |
| ກໍ External network | PBS_CLI1_WALLET_00 | 5 FRT2PB5001 | PBS_CLI1_WALLET_005 | PBSOFRXXDLT | PBS | EUR | | FR | See Details |
| | PBS_CLI2_WALLET_00 | 1 FRT2PB5001 | PBS_CLI2_WALLET_001 | PBSOFRXXDLT | PBS | EUR | | FR | See Details |

• Fill in for the following fields:



- Dedicated Cash Wallet Alias is usually ShortName_WALLET_001, for example. The DCW alias can only contain alphanumeric characters, hyphen and underscore. If the DCW alias is filled with another special character, an error message will appear and prevent the submission of the request.
- Client Name is the Short Name of the client that will use the Dedicated Cash Wallet. It
 must correspond to the short name that appears in the global tab Client List sub tab
- Choose the *currency* for the wallet
- o Choose the right T2 account reference to link to the wallet to
- o Choose a valid from date starting from which the wallet is valid
- Valid To date is not mandatory

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Economic Financial stability | Calendar date 02- Business date 02- | -08-2024 14:48:: 12-2024 | 39 singleuser @ PBG Dedicated Cash Wallet (Dedicated Cash Wallet (| Owner Sustodian |
|---------------------------------|-----------------------------------|---|--|-----------------------------|---|-----------------|
| Ø Dashboard | Dedicated Cash Wallets > New Dedi | icated Cash Wallet | | | | |
| Dedicated Cash Wallets | New Dedicated Ca | ash Wallet | | | | |
| T2 accounts | PERIMETER | | 2/13/2024 | | Valid To | Ċ |
| BCBDC Operations | Dedicated Cash Wallet Type * | Dedicated Cash Wallet Alias * PBG_CLI1_WALLET_2 | Client Name (custody) * PBG-CLI1 | | | |
| <u>n</u> Global | | | | | | |
| ាំ External network | Currency * | T2 Account reference * | • | | | |
| 꼸 User administration | | | | | | |
| Parameters | CANCEL SUBMIT | | | | | |

• The newly created Dedicated Cash Wallet now appears in the *Inactive Dedicated Cash Wallets* – *managed* tab. Once the Valid from date is reached, the dedicated cash wallet becomes valid and appears on *Dedicated Cash Wallets* –*managed* tab.

| BANQ | UE DE FRANCE UROSYSTÈME | DL3S | Monetary strategy Financia stabi | al | Econor services | mic | Calendar Business | date 02-08-2024 14: date 02-12-2024 | 45:31 singleuser Dedicated Ca Dedicated Ca | PBG sh Wallet Owner sh Wallet Custodiar |
|---------------|----------------------------|-----------------------|---|----------------|--------------------|----------|----------------------|--|--|---|
| 🕜 Das | shboard | Dedicated Cash Wallet | s > Inactive Dedicated Cash Wallets | | | | | | | |
| Dec Wal | dicated Cash Illets | Inactive De | edicated Cash Walle | ts - m | Standard | ed | | | | |
| 🗇 T2 a | accounts | | | | | | | | | |
| 🖨 CBC | DC Operations | Wallet ID | | T2 Ac Refer | count ence | ♦ Wallet | Alias | Owner BIC | Owner Name | Country |
| <u>n</u> Glo | bal | 42Ay10bEuaalISV | /GHId7EF3YYGrBQ7E6sGV84LWZCm0= | FRT2F | PBG001 | PBG_C | LI1_WALLET_2 | PBGSGGXXDLT | PBG client | FR |
| <u>n</u> Exte | ernal network | Jh4FWFPOP2w69 | PcdIW3UJ58fcR1ceFa2J+ZUk0SMr/k= | FRT2F | PBG001 | PBG_C | LI2_WALLET2 | PBGSGGXXDLT | PBG client | FR |
| | | | | | | | | _ | | k |
| <u> </u> | er administration | 4 | | | | | | | | |

- Wallet ID column corresponds to the technical identity of the wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the wallet on DL3S platform
- Owner BIC corresponds to the BIC of the owner of the wallet
- Owner Name corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S
- *Currency* corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet



- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the wallet. At first, when the wallet is empty, it contains no data.
- Connected as the client whom the Dedicated Cash Wallet has been created for, the Dedicated Cash Wallet appears in the *Inactive Dedicated Cash Wallets-used* tab. Once the Valid from date is reached, the dedicated cash wallet appears on the *Dedicated Cash Wallets-used* tab.

| DL3S F | inancial stability | Cale Busi | iness date 02-08-2024 | 4 14:50:54 pbg μ Ded | ¿-cli1 @ PBG-CLI1 @ PBG dicated Cash Wallet User 🕹 |
|--|--|---|--|--|---|
| Dedicated Cash Wallets > Inactive Dedicated Cash Wallets | 5 | | | | |
| Inactive Dedicated Cash Wa | Standard Iss | uance | | | |
| | ▲ 14/-10-4 AU | A Managara DiG | | A Country Cod | |
| 42Ay10bEuaaliSWGHld7EF3YYGrBQ7E6sGV84LWZCr | Wallet Allas m0= PBG_CLI1_WALLET_2 | ▼ Manager BIC PBGSGGXXDLT | ▼ Manager Name PBG | FR FR | 02-13-20 |
| | | | | | • |
| | DL3S Dedicated Cash Wallets > Inactive Dedicated Cash Wallet Inactive Dedicated Cash Wallet Wallet ID 42Ay10bEuaalISWGHId7EF3YYGrBQ7E6sGV84LWZCC | DL3S Endering Endering Dedicated Cash Wallets > Inactive Dedicated Cash Wallets Inactive Dedicated Cash Wallets - used Inactive Dedicated Cash Wallets - used Standard Iss Wallet ID \$ Wallet Alias 42Ay10bEuaalISWGHId7EF3YYGrBQ7E6sGV84LWZCm0= PBG_CLI1_WALLET_2 | Marting Economic Busing Economic Busing Dedicated Cash Wallets > Inactive Dedicated Cash Wallets Inactive Dedicated Cash Wallets - used Issuance Standard Issuance Issuance Vallet ID ♦ Wallet Alias ♦ Manager BIC 42Ay10bEuaalISWGHId7EF3YYGrBQ7E6sGV84LWZCm0= PBG_CLI1_WALLET_2 PBGSGGXXDLT | DL3S Formation Formation Business date 02-12-2024 Business date 02-12-2024 Dedicated Cash Wallets > Inactive Dedicated Cash Wallets Inactive Dedicated Cash Wallets Inactive Dedicated Cash Wallets Standard Issuance Wallet ID ♦ Wallet Alias ♦ Manager BIC ♦ Manager Manager Name 42Ay10bEuaalISWGHId7EF3YYGrBQ7E6sGV84LWZCm0= PBG_CLI1_WALLET_2 PBGSGGXXDLT PBG | DL3S Example Example Example Example Business date 02-00-2024 (H3:0.34) pbp Dedicated Cash Wallets > Inactive Dedicated Cash Wallets Inactive Dedicated Cash Wallets - used Issuance Issuance Wallet ID |

4.1.3 Dedicated Cash Wallets view

Depending on the roles of the participant, four wallets view exist:

- o Dedicated Cash Wallet Owned
 - This tab is accessible to every *Dedicated Cash Wallet owner* and contains the list of every Dedicated Cash Wallet owned by the participant.
- o Dedicated Cash Wallet Managed
 - This tab is accessible to every *Dedicated Cash Wallet manager* and contains the list of every Dedicated Cash Wallet managed by the participant.
- o Dedicated Cash Wallet National Supervised
 - This tab is accessible to every *National CBDC supervisor* and contains the list of every Dedicated Cash Wallet supervised by the participant.
- o Dedicated Cash Wallet Used
 - This tab is accessible to every *Dedicated Cash Wallets user* and contains the list of every Dedicated Cash Wallet used by the participant.

| BAN | NQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monet strategy Fina s | ncial tability | Economic | Calen Busin | dar date 11-20-2023 ess date 12-31-2022 | : 11:12:22 sing Dedi Dedi +2 | leuser2 @ BDF cated Cash Wallet Owner cated Cash Wallet Manag | jer 2 |
|-----|-------------------------------|------------------------|------------|--------------------|--------------------------------|-------------------|---------------|----------------|--|---------------------------------------|---|-------|
| Ø | Dashboard | Dedicated Ca | sh Wallets | | | | | | | | | |
| G | Dedicated Cash Wallets | Owned | cated Cas | h wallet PBG_WALLI | ET_002 has been created | successfully | | | | | | |
| Ó | T2 accounts | Managed | red C | ash Walle | ts - manager | 4 | | | | | | |
| ₽ | CBDC Operations | National supervised | | | to manager | 4 | | | | Create a Dedicate | d Cash wallet | |
| ñ | Global | | | | | Stand | ard Issuance | | | | | |
| ñ | External network | Wallet ID | | T2 Account | 🗢 Wallet Alias | | ◆ Owner Name | ¢ Currency | ♦ Available | ¢ Country C | ode Token | |
| Ø | Reporting | PBG WA | U.ET. 001 | Reference | PRG WALLET 001 | PROSOCYVDIT | PBG | ELIP | Available | ED | See De | |
| 0 | Parameters | DBC WA | LLET_001 | EDT3DBC001 | PBG_WALLET_002 | PROSCOVADIT | client PBG | EUD | | 50 | See De | |
| | | FBG_WA | LLET_002 | FRIZEBOUUT | new | PBG3GGXADEI | client | EOR | | FK. | See De | |
| | | PBS_WAL | LET_001 | FRT2PBS001 | PBS_WALLET_001 | PBSOFRXXDLT | PBS client | EUR | 1 000 | FR | See De | |
| | | | | | | | | | | | | |



| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial stability | Economic services | Calendar dat Business date | e 11-20-2023 11:12 e 12-31-2022 | :03 pbs-cli1 @ PB Dedicated Cash | S-CLI1 @ PBS Wallet User |
|---|------------------------|--|----------------------|-------------------------------|------------------------------------|-------------------------------------|-----------------------------|
| 🕐 Dashboard | Dedicated Cash Wallets | | | | | | |
| Dedicated Cash Wallets | Used d Cas | h Wallets - use | ed | | | | |
| CBDC Operations | | | Standard Is | suance | | | |
| ក្នំ Global | | | | | | | |
| | Wallet ID | Wallet Alias | 🗢 Manager BIC | Manager Name | Currency | Available | ÷ (|
| toj Parameters | PBS_CLI1_WALLET_005 | PBS_CLI1_WALLET_005 | PBSOFRXXDLT | PBS | EUR | | I |
| | PBS_CLI1_WALLET_006 | PBS_CLI1_WALLET_006 | PBSOFRXXDLT | PBS | EUR | | - I |
| | | | | | | | • |

4.1.4 Administration of Dedicated Cash Wallets

The participant has access to different information about Dedicated Cash Wallet he is responsible for in order to administrate them.

4.1.4.1 Dedicated Cash Wallet owned

This tab is accessible to every **Dedicated Cash Wallet owner** and contains the list of every Dedicated Cash Wallet owned by the participant. Plus, it summarizes all characteristics of Dedicated Cash Wallets owned.

| BA | ANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financial stability | Economic services | Calendar da Business da | te 11-20-2023 te 12-31-2022 | 11:16:38 | singleuser @ P Dedicated Cash V Dedicated Cash V | BG Vallet Owner 온 Vallet Custodian |
|----|--------------------------------|-------|-------------------|-------------------------|--|----------------------|----------------------------|--------------------------------|------------------|--|--|
| Ø | Dashboard | Dedic | ated Cash Wallets | | | | | | | | |
| Ó | Dedicated Cash Wallets | De | dicated C | ash Wallet | s - owned | | | | Create a D | edicated Cash | wallet |
| Ó | T2 accounts | | | | | Clandard Jacua | | | | | |
| ₽ | CBDC Operations | | | | | Standard Issua | nce | | | | |
| ů | Global | Wal | let ID | T2 Account Reference | ♦ Wallet Alias | ✦ Manager BIC | ♦ Manager Name | Currency | \$ _{Av} | ailable | ◆ _{Count} |
| ñ | External network | P | BG_WALLET_001 | FRT2PBG001 | PBG_WALLET_001 | BDFEFR2TXXX | BDF | EUR | | | FR |
| 8 | User administration | P | BG_WALLET_002 | FRT2PBG001 | PBG_WALLET_002 | BDFEFR2TXXX | BDF | EUR | | | FR |
| Ø | Parameters | | | | | | | | _ | | Þ |

- Wallet ID column corresponds to the technical identity of the wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the wallet on DL3S platform
- Manager BIC corresponds to the BIC of the manager of the wallet
- Manager Name corresponds to the name of the manager of the Dedicated Cash Wallet in DL3S
- Currency corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the wallet. At first, when the wallet is empty, it contains no data.
- Valid From date



- Valid To date
- By clicking on the wallet alias, the participant has access to the movement history of the Dedicated Cash Wallet. Each instruction on the Dedicated Cash Wallet is registered with the date and time, the counterpart (accordingly to operations' type privacy requirements), the amount of the transaction and the ID instruction. The owner can also check the balance of the wallet.

 \sim

| PBG | | Movement history | | | | | |
|-------------|----------------|---|----------------|----------|------------------------|----------------|---------|
| Cash Wallet | PBG_WALLET_001 | | | | | | |
| Owner BIC | PBGSGGXXDLT | Instruction ID | Operation Type | Amount | Date/Time | Counterpart ID | Counter |
| Currency | EUR | | | | | | wallet |
| 2 Account | FRT2PBG001 | BD_CLOSURE_3572720a- 198a-4405-bd85- 1f1f1f0cc4d1 | REDEEM | -169 908 | 11-16-2023 18:36:38 | | EUR_TR |
| Manager BIC | BDFEFR2TXXX | transfer_pbs_pbg | TRANSFER | +45000 | 11-15-2023 13:46:39 | | PBS_WA |
| | | transfer_pbg_pbb | TRANSFER | -13500 | 11-15-2023 13:46:02 | | PBB_WA |
| | | transfer_pbg_pbs | TRANSFER | -15000 | 11-15-2023 13:45:27 | | PBS_WA |
| | | transfer_pbb_pbg | TRANSFER | +3408 | 11-15-2023 13:44:12 | | PBB_WA |
| | | issuance_PBG | ISSUANCE | +150000 | 11-15-2023 10:55:48 | | EUR_TR |
| | | < C | | | | | |
| | | Balance | | | | | 0 ! |

4.1.4.2 Dedicated Cash Wallet managed

This tab is accessible to every *Dedicated Cash Wallet manager* and contains the list of every Dedicated Cash Wallet managed by the participant.

| BANQUE DE FRANCE | DL3S | | Monetary strategy Financial stability | conomic vices Busine | ar date 11-20-2023 ss date 12-31-2022 | 11:17:21 single Dedicat Dedicat +2 | user2 @ BDF ted Cash Wallet Owner ted Cash Wallet Manage |
|---------------------------|------------------------|-------------------------|--|-------------------------|--|---|--|
| 🕐 Dashboard | Dedicated Cash Wallets | | | | | | |
| Dedicated Cash Wallets | Dedicated 0 | ash Walle | ts - manageo | ł | | Create a Dedicat | ed Cash wallet |
| T2 accounts | | | 01-0 | deed. Issues | | | |
| GBDC Operations | | | Stand | dard Issuance | | | |
| <u>កំ</u> Global | Wallet ID | T2 Account Reference | ◆ Wallet Alias | ◆ Owner BIC | + Owner Name | ♦ Currency | ◆ _{Available} |
| ក្នំ External network | PBG_WALLET_001 | FRT2PBG001 | PBG_WALLET_001 | PBGSGGXXDLT | PBG client | EUR | |
| | DDC WALLET 000 | FRT2PBG001 | PBG_WALLET_002 | PBGSGGXXDLT | PBG | EUR | |
| | PBG_WALLET_002 | | | | client | | |

- Wallet ID column corresponds to the technical identity of the wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the Dedicated Cash Wallet on DL3S platform



- Owner BIC corresponds to the BIC of the owner of the Dedicated Cash Wallet
- Owner Name corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S
- *Currency* corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the wallet. At first, when the wallet is empty, it contains no data.
- Valid From date
- Valid To date
- By clicking on the wallet alias, the participant has access to the movement history of the Dedicated Cash Wallet managed. Each instruction on the Dedicated Cash Wallet is registered with the date and time, the counterpart (accordingly to operations' type privacy requirements), the amount of the transaction and the ID instruction. The manager can also check the balance of the Dedicated Cash Wallet.

| E | | UE DE FR. | | DL3S | | | Monetary strategy Financial stability | Econ | nomic es Br | alendar date usiness date | 11-20-2023 11:1 12-31-2022 | 8:17 Single Dedica Dedica +2 | user2 @ E ted Cash Wa ted Cash Wa | 3DF allet Owner allet Manager | 2× |
|---|-------------|---------------------|-------------------------|------------|----------------------|-------------------|--|---------|----------------|------------------------------|-------------------------------|---------------------------------------|---|--|----|
| Ø | | hboard | | De | dicated Cash Wallets | | | | | | | | | | |
| Ó | Ded Wall | licated Ca llets | ash | D | edicated Cas | h Walle | ts - mar | aged | | | С | reate a Dedica | led Cash v | vallet | |
| Ó | T2 a | account | PBG | | | Moveme | ent history | | | | | | × | | |
| ₽ | CBD | DC Opei | Cash Walle | et | PBG_WALLET_002 | | | | | | | | | | |
| ů | Glob | bal | Owner BIC Currency | | PBGSGGXXDLT | Instruction ID | on Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manager BIC | | Available | |
| ů | | ernal ne | T2 Accoun | t | FRT2PBG001 | | | | | | | | _ | | |
| Ø | Rep | oorting | Country Co Manager E | ode BIC | FR BDFEFR2TXXX | Balance | | | | | | 0 EUF | ł | | |
| 0 | Para | ameters | | 41 | PBS_WALLET_001 F | RT2PBS001 | PBS_WAL | LET_001 | PBSOFRX | KDLT clie | ent | EUR | | 1000 | |

It is to be noted that this page also enables to create a Dedicated Cash Wallet as *Dedicated Cash Wallet manager* (see <u>4.1.1</u>).

4.1.4.3 Dedicated Cash Wallet National supervised

This tab is accessible to every *National CBDC supervisor* and contains the list of every Dedicated Cash Wallet supervised by the participant.



| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Mone strateg Fin | etary y Economic sancial stability | Calendar date 12 Business date 12 | 1-20-2023 11:21:53 2-31-2022 | singleuser2 @ BDF Dedicated Cash Wallet (Dedicated Cash Wallet (+2 | Owner Manag |
|---|---------------------|-------------------------|---|--------------------------------------|---------------------------------|---|----------------|
| ⑦ Dashboard | Dedicated Cas | sh Wallets - | national supe | rvised | | | |
| Dedicated Cash Wallets | | | Standard Issu | ance | | | |
| T2 accounts | Wallet ID | T2 Account Reference | ◆ Wallet Alias | Manager BIC | Manager Name | ♦ Currency | ŀ |
| GBDC Operations | PBG_WALLET_001 | FRT2PBG001 | PBG_WALLET_001 | BDFEFR2TXXX | BDF | EUR | |
| n Global | PBG_WALLET_002 | FRT2PBG001 | PBG_WALLET_002 | BDFEFR2TXXX | BDF | EUR | |
| | PBS_WALLET_001 | FRT2PBS001 | PBS_WALLET_001 | BDFEFR2TXXX | BDF | EUR | |
| n External network | PBG_CLI1_WALLET_001 | FRT2PBG001 | PBG_CLI1_WALLET_001 | PBGSGGXXDLT | PBG | EUR | |
| ⑦ Reporting | PBG_CLI1_WALLET_002 | FRT2GS001 | PBG_CLI1_WALLET_002 | PBGSGGXXDLT | PBG | EUR | |
| | PBG_CLI2_WALLET_001 | FRT2PBG001 | PBG_CLI2_WALLET_001 | PBGSGGXXDLT | PBG | EUR | |
| Parameters | PBS_CLI1_WALLET_005 | FRT2PBS001 | PBS_CLI1_WALLET_005 | PBSOFRXXDLT | PBS | EUR | |
| | PBS_CLI1_WALLET_006 | FRT2PBS001 | PBS_CLI1_WALLET_006 | PBSOFRXXDLT | PBS | EUR | |
| | PBS_CLI2_WALLET_001 | FRT2PBS001 | PBS_CLI2_WALLET_001 | PBSOFRXXDLT | PBS | EUR | |

- Wallet ID column corresponds to the technical identity of the Dedicated Cash Wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the Dedicated Cash Wallet on DL3S platform
- Manager BIC corresponds to the BIC of the manager of the Dedicated Cash Wallet
- Manager Name corresponds to the name of the manager of the Dedicated Cash Wallet in DL3S
- Currency corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- *Country Code* is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the Dedicated Cash Wallet. At first, when the Dedicated Cash Wallet is empty, it contains no data.
- Valid From date
- Valid To date
- By clicking on the wallet alias, the participant has access to the movement history of the Dedicated Cash Wallet supervised. Each instruction on the Dedicated Cash Wallet is registered with the date and time, the counterpart (accordingly to operations' type privacy requirements), the amount of the transaction and the ID instruction. The manager can also check the balance of the Dedicated Cash Wallet.



| BANQUE DE FR | | DL3S | Moneta strategy Finar st | ery Econ service ability | omic Bu | ilendar date 1 isiness date 12 | 1-20-2023 11:22 2-31-2022 | 2:34 singleus Dedicated Dedicated | er2 @ BDF Cash Wallet Owner Cash Wallet Manage | r Å |
|-------------------------------|-------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|------------|-----------------------------------|------------------------------|---|--|-----|
| 🕐 Dashboard | | Dedicated Cas | sh Wallets - | national s | upervi | sed | | | | |
| Dedicated Co Wallets | ash | | | Standard | Issuance | | | | | |
| T2 account | PBG | | Movement hi | story | | | | | × | |
| 🖨 CBDC Oper | Cash Walle | t PBG_CLI1_WALLET_002 | | | | | | | | |
| ាំ Global | Owner BIC Currency T2 Account | PBGSGGXXDLT EUR FRT2GS001 | Instruction O ID Ty | peration /pe Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manager BIC | | |
| Reporting | Country Co Manager B | de FR IC PBGSGGXXDLT | Balance | | | | | 0 EUR | | |
| | | PBS_CLI1_WALLET_005 | FRT2PBS001 | PBS_CLI1_WALL | ET_005 | PBSOFRXXDLT | PBS | EUł | 2 | |
| | | PBS_CLI1_WALLET_006 | FRT2PBS001 | PBS_CLI1_WALLI | ET_006 | PBSOFRXXDLT | PBS | EUI | 2 | |
| | | PBS_CLI2_WALLET_001 | FRT2PBS001 | PBS_CLI2_WALLI | ET_001 | PBSOFRXXDLT | PBS | EUF | 2 | |

4.2 CBDC issuance (CBDC issuer only)

To operate a CBDC issuance, one needs to connect as a *CBDC issuer* since only a *CBDC issuer* can issue CBDCs. The CBDC issuance includes a four eyes process to ensure a verification of the issuance.

• Connect as a CBDC issuer and click on the Issued tab in the CBDC operations tab



• Click on the Create a CBDC Operation button



| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monetary strategy Financial stability | Economic services | Calendar date 11-20-202 Business date 12-31-202 | 3 11:23:39 singl Dedic 2 Dedic +2 | euser2 @ BDF ited Cash Wallet Owner ited Cash Wallet Manage | r d |
|---------------------------------|----------------------|---------------------|--|----------------------------|--|--|---|-----|
| ⑦ Dashboard | CBDC | | | | | | | |
| Dedicated Cash Wallets | CBDC Oper | ations - is | ssued | | | Create a C | BDC Operation | |
| T2 accounts | | | | | | | | |
| CBDC Operations | Туре | • | | | | | | |
| <u>ពំ</u> Global | CBDC Operation ID | \$ Status | ¢ Type | ♦ Accepted Timestamp | ≑ Creation Date | Debited Dedicated Cash Wallet | ♦ Manager BIC debited DCW | |
| ក្នំ External network | ISSUANCE_PBS | SETTLED | Issuance | 11-15-2023 10:55:20 | 12-31-2022 | EUR_TRANSI | CBCONSPPXX | |
| Reporting | issuance_PBG | SETTLED | Issuance | 11-15-2023 10:55:20 | 12-31-2022 | EUR_TRANSI | CBCONSPPXX | |
| (c) Parameters | issusance -pbs2 | SETTLED | Issuance | 11-20-2023 10:22:12 | 12-31-2022 | EUR_TRANSI | CBCONSPPXX | |
| | | | | | | | • | |

One has to fill in: New CBDC operation

| PARTIES | | | |
|---|--|--------------------------|-------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| issuance_EURTRANSIT_PBSWALLET001_2023201111 | | BDF | BDFEFR2TXXX |
| External network * | | | |
| 🔿 Yes 💿 No | | | |
| DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| EUR_TRANSIT | CBCONSPPXXX | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | |
| | | | |
| TRANSFER | | | |
| Amount * Currency * | | | |
| 2000 Euro | ~ | | |

CANCEL SUBMIT

- CBDC Operation ID, it is to be unique. Commonly the form is ISSUANCE_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- Type is issuance
- Instructing party name, the name of the issuer instructing the issuance
- Instructing party BIC, the BIC of the issuer instructing the issuance
- o External button should be no has the issuance happens on DL3S platform



- Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- *Credited Dedicated Cash Wallet Manager BIC* corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- Currency corresponds to the currency of the issued CBDC
- Once the issuance is submitted, the four eyes process intervenes.
- In the 4 eyes process tab the issuance operation just launched appeared with the "WAITING_FOR_APPROVAL" status. The 4 eyes process is a Central bank internal process of checking of an issuance. Concretely, another user of the central bank issuing CBDC will need to approve or to send back to be reviewed the issuance operation.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financia stabi | Economic al lity | | Cale Busi | ndar date 11-20-202 iness date 12-31-202 | 13 11:25:43 singl Dedic 2 Dedic *2 | euser2 @ BDF ated Cash Wallet Owner ated Cash Wallet Manager | & |
|---------------------------------|------------------------|--------------|--|---|------------------------|------------------------|---|---|---|--|---|
| Ø Dashboard | | 4 Eyes Proce | 255 | | | | | | | | |
| Dedicated Cash Wallets | | 4 Eyes | s Process | | | | | | | | |
| T2 accounts | | | | | | | | | | | |
| B CBDC Operations | Owned | | peration ID | ≑ Туре | ≑ Status | Status Timestamp | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | ◆ Manager Credited | |
| n Global | Managed | | EURTRANSIT_PBSWALLET001_20232011112425 | ISSUANCE | WAITING_FOR_APPROVAL | 11-20-2023 11:25:27 | EUR_TRANSI | CBCONSPPXXX | PBS_WALLET | BDFEFR2 | |
| n External network | Issued | | | | | | | | | • | |
| Reporting | National supervised | | | | | | | | | | |
| Parameters | 4 eyes proc | ess | | | | | | | | | |
| | | | | | | | | | | | |

• One need now to connect as another user of the same central bank and click on the 4 eyes process tab

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financi stab | Economic al litty | | Cale Bus | endar date 11-20-202 iness date 12-31-202 | 3 11:26:28 Ded 2 Ded +2 | cated Cash Wallet Owner cated Cash Wallet Manager | 25 |
|---------------------------------|------------------------|--------------|--|---|-------------------------|------------------------|-------------------------------------|--|-------------------------------------|--|----|
| ⑦ Dashboard | | 4 Eyes Proce | 155 | | | | | | | | |
| Dedicated Cash Wallets | | 4 Eyes | Process | | | | | | | | |
| T2 accounts | | | | | | | | | | | |
| CBDC Operations | Owned | | peration ID | ¢ Туре | ≑ Status | Status Timestamp | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cas Wallet | h Gredited | |
| n Global | Managed | | EURTRANSIT_PBSWALLET001_20232011112425 | ISSUANCE | WAITING_FOR_APPROVAL | 11-20-2023 11:25:27 | EUR_TRANSI | CBCONSPPXXX | PBS_WALLET | BDFEFR2 | |
| n External network | Issued | | | | | | | | | | |
| Reporting | National supervised | | | | | | | | | | |
| Parameters | 4 eyes pro | cess | | | | | | | | | |

• By clicking on the operation ID, the second user has access to the issuance operation information. It is only readable information, no modification can be made.



4 Eyes Process

| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
|--|---|--------------------------|-------------------------|
| issuance_EURTRANSIT_PBSWALLET001_2023201111; | ISSUANCE | BDF | BDFEFR2TXXX |
| External network * | | | |
| 🔿 Yes 💿 No | | | |
| | | | |
| Dedicated Cash WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| EUR_TRANSIT | CBCONSPPXXX | | |
| | | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | |
| | | | |
| TRANSFER | | | |
| | | | |
| Amount * Currency * | * | | |
| 2000 Euro | ~ | | |

• After checking, the second user can either approve the issuance or send it back to be reviewed

4.2.1 4 eyes process approval

• If the second user approves the issuer, the issuance operation disappears from the 4 eyes process tab

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Finandal | Economic services | Calendar date 11-20-2023 11:28:4 Business date 12-31-2022 |
|---------------------------------|------------------------|----------------------------------|----------------------|--|
| ⑦ Dashboard | 4 Eyes Proce | 55 | | |
| Dedicated Cash Wallets | 4 Eyes | Process | | |
| T2 accounts | | | No data available | |
| B CBDC Operations | Owned | | | |
| <u>n</u> Global | Managed | | | |
| n External network | Issued | | | |
| Reporting | National supervised | | | |
| Parameters | 4 eyes process | | | |

- Connecting back as the first user who instructed the operation, the operation now appears in the *issued* tab with the "settled" status.
- One can control by checking the credited and the debited wallets that the issuance indeed happened.



| | tary Economic anclal Stability Calendar date 11-20-2023 11:29-52 Bediate Claim Wai anclal Stability Stability Calendar date 12-31-2022 Claim Wai Stability Calendar date 12-31-2022 Claim Wai (2) | ₩ et Owner let Manager _2 |
|---|--|---------------------------------|
| | | |
| Taxaada Type | Create a CBDC Operation | |
| PBS Cancer part Cancer part <t< th=""><th></th><th></th></t<> | | |
| I Catala I Catala I Characterization ID I Status I Tope I Continuity I Manager BLC Manage | | |
| I Extratal network ISSUANCE_PBS SETTLED Issuance 1115-2023 1128-38 12-31-2022 EUR_TRANSIL CBCONSPROX PB5_WALLET Image: PBS Image: PBS< | + + Accepted + Creation Date + Debited + + Credited Debited + + Credited Dedited Dedited | 1 |
| Insuance_BURTRANSIT_PBSWALLETOOT_00232011112425 SETTLED Issuance 11:00:0023 11:28:43 12:31:2022 EUR_TRANSIL CBCONSPPXXX PBS_WALLET Issuance_PBG SETTLED Issuance 11:00:0023 12:31:2022 EUR_TRANSIL. CBCONSPPXXX PBG_WALLET Issuance_PBG SETTLED Issuance 11:00:0023 12:31:2022 EUR_TRANSIL. CBCONSPPXXX PBG_WALLET PBS Issuance_DDI2 SETTLED Issuance 11:00:0023 12:31:2022 EUR_TRANSIL. CBCONSPPXXX PBG_WALLET Currency EUR PBSSORX0LT Issuance_EURTRANSIT_PBSWALLETOT_02023011112425 SISUANCE -2000 11:20:2023 11:28:100 Counterpart Wallet CBCONSPPXXX PBS_WALLET Currency EUR RR Issuance_EURTRANSIT_PBSWALLETOT_02023011112425 SISUANCE +2000 11:20:2023 11:29:11 EUR_TRANSIT CBCONSPPXXX BCBCONSPPXXX Currency EUR RR Issuance_EURTRANSIT_PBSWALLETOT_02023011112425 SISUANCE +2000 11:20:2023 11:29:11 EUR_TRANSIT CBCONSPPXXX EUR_TRANSIT | Issuance 11-15-2023 12-31-2022 EUR_TRANSI CBCONSPPIOX PBS_WALLET | |
| Brannets Issuance-98G SETTLED Issuance 11-15-2023 10:53:20 12:31-2022 EUR_TRANSIL. CBCONSPROX PBG_WALLET BSUSANCE-962 SETTLED Issuance 11-20-2023 12:31-2022 EUR_TRANSIL. CBCONSPROX PBG_WALLET PBS Kassance-pbi2 SETTLED Issuance 11-20-2023 12:31-2022 EUR_TRANSIL. CBCONSPROX PBG_WALLET Cash Wallet PBS_WALLET.on Novement history Issuance-pbi2 SETTLED Issuance - pbi2 Issuance-pbi2 Counterpart Manager Country Code RR RATUEDD SSUANCE -2000 11-20-2023 10:22+11 EUR_TRANSIT CBCONSPROX Country Code RR R SSUANCE -1000 11-20-2023 10:22+11 EUR_TRANSIT CBCONSPROX DCLOSURE_7136726-a017-447c 69ft-22c0-404-acee REDEEM -1000 11-20-2023 10:22+11 EUR_TRANSIT CBCONSPROX BD_CLOSURE_7136726-a017-447c 69ft-22c0-404-acee REDEEM -1000 11-20-2023 10:22+11 EUR_TRANSIT CBCONSPROX Trade-httop-pba-seceret-16110s_RECE | Issuance 11-20-2023 12-31-2022 EUR_TRANSI CBCONSPPXXX PBS_WALLET | |
| Issuance -pbs2 SETTLED Issuance 11/20-2023 10/22:12 12:31:2022 EUR_TRANSIL. CBCONSPPOX PBS_WALLET. PBS Cash Wallet PBS_WALLET_ool Owner BIC PBSOFRXXULT Curreny Eur Curreny Eur Curreny Eur T2 Account FR12PB3001 Country Code FR Manager BIC BDFEFR2TXXX BDFEFR2TXXX Eur_TraAnsit (Disput) Trade-httc-pbs-pbb-secret-16110s_RECE DVP Trade-httc-pbs | Issuance 11-15-2023 12-31-2022 EUR_TRANSI CBCONSPPOOX PBG_WALLET | |
| PBS Movement history Cash Wallet PBS_WALLET_001 Owner BIC PBSOPRXXDLT Curreny EuR T2 Account FRT2PBS001 Country Code FR Manager BIC BDFEFRZTXXX BDFEFRZTXXX Frt2PBS001 Trade-httc-pbs-pbs-secret-1611bis_RECE DVP TashSFER -12000 Trade-httc-pbs-pbs-secret-1611bis_RECE DVP T | Issuance 11-20-2023 12-31-2022 EUR_TRANSI CBCONSPPXOX PB5_WALLET | |
| Owner BIC PBSOFRXXDLT Instruction ID Operation Type Annunt Date/Time Counterpart Val Counterpart Values Currency EUR Issuance_EURTRANSIT_PBSWALLETO01_2023011112425 ISSUANCE +2000 11-20-2023 11:9:11 EUR_TRANSIT CBCONSPPXXX T2 Account FR12P85001 Issuance_pbs2 ISSUANCE +1000 11-20-2023 10:2:41 EUR_TRANSIT CBCONSPPXXX Country Code FR Trade-htic-pbs-pbo-secret-1611bit, RECE DVP -2156 11-16-2023 16:3:2:3 EUR_TRANSIT CBCONSPPXXX Manager BIC BDFEFR2TXXX Trade-htic-pbs-pbo-secret-1611_RECE DVP -50000 11-16-2023 16:3:2:3 PBS_VALLET_001 CBULX00LT Trade-htic-pbs-pbo-secret-1611_RECE DVP -50000 11-15-2023 13:4:3:9 PBG_VALLET_001 CBULX00LT Trade-htic-pbs-pbo-secret-1511_RECE DVP -50000 11-15-2023 13:4:3:9 PBG_VALLET_001 CBULX00LT Trade-htic-pbs-pbo-secret-1511_RECE DVP -50000 11-15-2023 13:4:3:9 PBG_VALLET_001 CBULX00LT Trade-htic-pbs-pbo-secret-1511_RECE DVP | | > |
| Currency EUR Issuance_EURTRANSIT_PESWALLET001_20232011112425 ISSUANCE -2000 11:20:2023 11:29:11 EUR_TRANSIT CBCONSPPXOX T2 Account FRIZPBS00 Issuance_euRZ ISSUANCE +100 11:20:2023 10:22:41 EUR_TRANSIT CBCONSPPXOX Country Code FR Manager BIC BDFEFR2TXXX Fride-Init-pospbo-secret-1611bg.EEC DVP -5000 11:16:2023 16:32:32 PBGSGGX/DLT Trade-Init-pospbo-secret-1611bg.EEC DVP -5000 11:16:2023 16:32:32 PBGSGGX/DLT Trade-Init-pospbo-secret-1611bg.EEC DVP -5000 11:16:2023 16:32:32 PBGSGGX/DLT Trade-Init-pospbo-secret-1611bg.EEC DVP -5000 11:15:2023 13:47:24 PBG_WALLET_001 CBULX/DDLT Trade-Init-pos_pbo-secret-1611bg.EEC DVP -5000 11:15:2023 13:47:24 PBG_WALLET_001 CBULX/DDLT Trade-Init-pos_pbo-secret-1511ger_E DVP -5000 11:15:2023 13:47:24 PBG_WALLET_001 CBULX/DDLT Trade-Init-pos-pbo-secret-1511fer_RECE DVP -5000 11:15:2023 12:07:88 PBG_WALLET_001 CBULX/DDLT | Operation Type Amount Date/Time Counterpart ID Counterpart wallet Counterpart Manage | er BIC |
| T2 Account FRIZP8001 issuance-pbs2 ISSUANCE +1000 11-20-2023 10-22-41 EUR_TRANSIT CBCONSPPOX Country Code FR BD_CIOSURE_7135725-cb17-477-971f-2c04de4cee REDEM -216 11-16-2023 18:36-33 EUR_TRANSIT CBCONSPPOX Manager BIC BDFEFR2TXXX Frade-httl-pbs-pbo-secret-1611big_RECE DVP -50000 11-16-2023 18:36-33 EUR_TRANSIT CBCONSPPOX Trade-httl-pbs-pbo-secret-1611big_RECE DVP -50000 11-16-2023 18:36-33 PBE_WALLET_001 CBULXUOUT transfer_pbs_pbs transfer_pbs_pbs TRANSFER -45000 11-15-2023 13:45:27 PBE_WALLET_001 BDFEFR27XXX transfer_pbs_pbs transfer_pbs_pbs TRANSFER -45000 11-15-2023 13:45:27 PBE_WALLET_001 BDFEFR27XXX transfer_pbs_pbs transfer_pbs_pbs TRANSFER -45000 11-15-2023 13:45:37 PBE_WALLET_001 BDFEFR27XXX transfer_pbs_pbs transfer_pbs_pbs-secret-1511tiers_RECE DVP -50000 11-15-2023 12:02:48 PBE_WALLET_001 CBCNLXDUT Trade-httic-pbs-pbs-1511_EECE DVP | ISSUANCE +2 000 11-20-2023 11:29:11 EUR_TRANSIT CBCONSPPXXX | |
| Kind Gold FR BD_CLOSURE_7136729:ceb17-417:91142:c044e4cee REDEEM -2156 11-16-2023 18:36:43 EUR_TRANSIT CBCOMSPPOXOX Country Code FR BD_FEFR2TXOX Frade-thic-pos-pos-seret-1611bits_RECE D/P -50000 11-16-2023 18:36:43 EUR_TRANSIT CBCONSPPOXOX Manager BIC BDFEFR2TXOX Trade-thic-pos-pos-seret-1611bits_RECE D/P -50000 11-16-2023 18:47:24 PBB_WALLET_001 CBD/LXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | ISSUANCE +1000 11-20-2023 10:22:41 EUR_TRANSIT CBCONSPRXX | |
| BDFEFR2TXOD Trade-htic-pbs-pbi-secret-1611big_RECE DVP -50000 11-16-2023 1632:32 PBGSGGOXDLT Manager BiC BDFEFR2TXOD Trade-htic-pbs-pbi-secret-1611g_RECE DVP -50000 11-16-2023 1632:32 PBGSGGOXDLT transfer_pbs_pbi-secret-1611g_RECE DVP -50000 11-16-2023 1632:32 PBGSGGOXDLT transfer_pbs_pbi-secret-1611g_RECE DVP -50000 11-16-2023 1632:32 PBG_VALLET_001 CBULLODOLT transfer_pbs_pbis Transfer A5000 11-15-2023 13:46:39 PBG_VALLET_001 BDFEFR2TXOX transfer_pbs_pbis Transfer TRANSFER -15000 11-15-2023 13:44:39 PBG_VALLET_001 BDFEFR2TXOX transfer_pbs_pbis Transfer DVP -5000 11-15-2023 12:49:28 PBGSGGOXDLT Trade-htic-pbs-pbis-secret-1511ters_RECE DVP -5000 11-15-2023 12:09:28 PBGSGGOXDLT Trade-htic-pbs-pbis-secret-1511ters_RECE DVP -5000 11-15-2023 12:09:28 PBGSGGOXDLT Trade-htic-pbs-pbis1511_RECE DVP -50000 11-15-2023 12:09:28 PBGSGGOXDLT Trade- | REDEEM -2156 11-16-2023 18:36:43 EUR_TRANSIT CBCONSPPXXX | |
| Manager BIC BDFEFR2TXXX Trade-htic-pbs-pbs-secret-1611_RECE DVP -50000 11.16.2023 1630:30 PBGSGGGVDLT transfer_pbs_pbb TRANSFER -1200 11.15.2023 13:47:24 PBG_WALLET_001 CBULLTOUT transfer_pbs_pbb TRANSFER -45000 11.15.2023 13:46:39 PBG_WALLET_001 BDFEFR2TXXX transfer_pbs_pbb TransFer_pbs_pbb TRANSFER +5000 11.15.2023 13:46:39 PBG_WALLET_001 BDFEFR2TXXX transfer_pbs_pbb TransFer_pbs_pbb TRANSFER +4356 11.15.2023 13:44:39 PBG_WALLET_001 CBULLXXXIT transfer_pbs_pbb-secret-1511tiers_RECE DVP -5000 11.15.2023 12:09:28 PBGSGGKVDLT Trade-htic-pbs-pbo-secret-1511tiers_RECE DVP -5000 11.15.2023 12:09:28 PBGSGGKVDLT Trade-htic-pbs-pbo-1511_RECE DVP -5000 11.15.2023 12:09:28 PBGSGGKVDLT Trade-htic-pbs-pbo-1511_RECE DVP -5000 11.15.2023 12:09:28 PBGSGGKVDLT Trade-htic-pbs-pbo-1511_RECE DISUANCE_PT -5234000 11.15.2023 10:55:48 EUR_TANSTT CBCONSPEVX <th>DVP -50000 11-16-2023 16:32:32 PBGSGGXXDLT</th> <th></th> | DVP -50000 11-16-2023 16:32:32 PBGSGGXXDLT | |
| transfer pbs_pbb TRANSFER 1.200 11.15.2023 13.47.24 PBBWALLET_001 CBUXLUOOLT transfer_pbs_pbs TRANSFER 45000 11.15.2023 13.47.34 PBGWALLET_001 BDFER2TOXX transfer_pbs_pbs TRANSFER 45000 11.15.2023 13.44.39 PBGWALLET_001 BDFER2TOXX transfer_pbs_pbs TRANSFER 4356 11.15.2023 13.44.39 PBGWALLET_001 CBUXLDXOLT transfer_pbs_pbs.secret-1511tiers_RECE DVP -5000 11.15.2023 12.09.28 PBG_SGGGXDLT Trade-htic-pbs-pbs1511_RECE DVP -10000 11.15.2023 12.09.28 PBGSGGKVDLT IssUANCE_PFS ISSUANCE -234000 11.15.2023 12.09.28 EUR_TRANSIT CBCONSPROX | DVP -50 000 11-16-2023 16:30:30 PBG5GGXXDLT | |
| transfer_pob_pbg TRANSFER 4-5000 11-15-2023 13-46.39 PBG_WALLET_001 BDFEFR2TXXX transfer_pob_pbs TRANSFER +15000 11-15-2023 13-46.39 PBG_WALLET_001 BDFEFR2TXXX transfer_pob_pbs TRANSFER +4356 11-15-2023 13-46.39 PBG_WALLET_001 BDFEFR2TXXX transfer_pob_pbs pbs TRANSFER +4356 11-15-2023 13-46.39 PBG_WALLET_001 BDFEFR2TXXX Trade-htic-pbs-pbs-secret-1511tiers_RECE DVP -5000 11-15-2023 12-02-46 PBGSGGXVDLT Trade-htic-pbs-pbo1511_RECE DVP -100000 11-15-2023 12-02-46 PBGSGGXVDLT ISSUANCE_PFS ISSUANCE -2340000 11-15-2023 12-02-46 EUR_TRANSIT CBCONSPENX | TRANSFER -1200 11-15-2023 13:47:24 PBB_WALLET_001 CBLXLLXXDLT | |
| transfer_pbg_pbs TRANSFER +15000 11-15-2023 13:45:27 PBG_WALLET_001 BDFEFR21XXX transfer_pbg_pbs transfer_pbg_pbs TRANSFER +4356 11-15-2023 13:4-239 PBB_WALLET_001 CBUXLXX0LT Trade-htic-pbs-pbb-secret-1511tiers_RECE D/P -5000 11-15-2023 12:09:28 PBB_SGGGX0LT Trade-htic-pbs-pbb-secret-1511tiers_RECE D/P -100000 11-15-2023 12:09:28 PBBSGGGX0LT Trade-htic-pbs-pbb-secret-1511tiers_RECE D/P -100000 11-15-2023 12:09:28 PBBSGGX0LT Trade-htic-pbs-pbb-secret-1511tiers_RECE D/P -100000 11-15-2023 12:09:28 PBBSGGX0LT Trade-htic-pbs-pbs-pbs-secret-1511tiers_RECE D/P -200000 11-15-2023 12:09:28 PBBSGGX0LT | TRANSFER -45000 11-15-2023 13:46:39 PBG_WALLET_001 BDFEFR2TXXX | |
| transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb transfer_pbb_pbb transfer_pbb_pbb transfer_pbb transfer_pbb <th< td=""><th>TRANSFER +15000 11-15-2023 13:45:27 PBG_WALLET_001 BDFEFR2TXXX</th><td></td></th<> | TRANSFER +15000 11-15-2023 13:45:27 PBG_WALLET_001 BDFEFR2TXXX | |
| Trade-httc-pbs-pbs-secret-1511tiers_RECE DVP -5000 11.15-202312.09:28 PBGSGG/XDLT Trade-httc-pbs-pbs1511_RECE DVP -100000 11.15-202312.09:28 PBGSGG/XDLT ISSUANCE_PS5 ISSUANCE -234000 11.15-20231055:48 EUR_TRANSIT CBGCNSPPIXOL | TRANSFER +4356 11-15-2023 13:44:39 PBB_WALLET_001 CBLXLLXXDLT | |
| Trade-httc-pbs-pbb1511_RECE DVP -100000 11-15-2023 12-02:46 PBGSGGXDLT ISSUANCE_PBS ISSUANCE +224000 11-15-2023 10-55:48 EUR_TRANSIT CBC0NSPPX0X | DVP -5000 11-15-2023 12:09:28 PBGSGGXXDLT | |
| ISSUANCE_PBS ISSUANCE +234000 11-15-2023 10:55:48 EUR_TRANSIT CBCONSPPXXX | DVP -100000 11-15-2023 12:02:46 PBGSGGXXDLT | |
| | ISSUANCE +234000 11-15-2023 10:55:48 EUR_TRANSIT CBCONSPPXXX | |
| | | |

4.2.2 4 eyes process reviewal

• If the second user chooses to review the issuance, the issuance operation appears in the *4 eyes* process tab with the "TO_BE_REVIEWED" status

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Mon stratej Fi | nancial stability | Economic services | | | | Calendar date 11-20-2 Business date 12-31-2 | 2023 12:14:40 2022 | singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Mana (+2) | r Ber Åk |
|--|------|---|-----------|----------------------|------------------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|--|-----------------------|--|-------------|
| Ø Dashboard | | 4 Eyes Process | | | | | | | | | | | |
| Dedicated Cash Wallets | | 4 Eyes Process | | | | | | | | | | | |
| T2 accounts | | | | | | | | | | | | | |
| B CBDC Operations | | CBDC Operation ID | ≑ Туре | ≑ Status | Status Timestamp | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amount | ¢ Currency | ¢ Initiator | |
| n Global | | issuance _EURTRANSIT_PBSWALLET001_20232011121316 | ISSUANCE | TO_BE_REVIEWED | 11-20-2023 12:14:01 | EUR_TRANSI | CBCONSPPXXX | PBS_WALLET | BDFEFR2TXXX | 15000 | EUR | singleus | |
| | | | | | | | | | | | | | |
| <u><u><u>n</u></u> External network</u> | | | | | | | | | | | | ÷. | |
| <u>n</u> External network Reporting | | | | | | | | | | | - | • | |

- The instructing issuer needs to connect on click on the *4 eyes process* tab where the issuance instruction also appears with the "TO_BE_REVIEWED" status.
- By clicking on the issuance operation ID, the instructing issuer can review the characteristics of the issuance and correct them.



| BANQUE DE FRANCE | DL3S | Monetary strategy Financial | Economic services | Calendar date 11-20-2023 12:16:09 Business date 12-31-2022 | singleuser @ BDF Dedicated Cash Wallet Owne Dedicated Cash Wallet Mana (+2) |
|---------------------------|--|--|--------------------------|---|--|
| © Dashboard | 4 Eyes Process | | | | |
| Dedicated Cash Wallets | PARTIES | | | | |
| T2 accounts | CBDC Operation ID * issuance_EURTRANSIT_PBSWALLET001_2023201112 | Type * ISSUANCE | Instructing party name * | Instructing party BIC * BDFEFR2TXXX | |
| B CBDC Operations | External ophion/ \$ | | | | |
| n Global | Yes No | | | | |
| n External network | Dedicated Cash WALLETS | | | | |
| ⑦ Reporting | Debited Dedicated Carb Wallet \$ | Debited Dedicated Carb Wallet Manager RIC \$ | | | |
| Parameters | EUR_TRANSIT | CBCONSPPXXX | | | |
| | Credited Dedicated Cash Wallet * PBS_WALLET_001 | Credited Dedicated Cash Wallet Manager BIC * | | | |
| | TRANSFER | | | | |
| | Amount * Currency t 15000 Euro | * | | | |
| | * Required Field BACK CANCEL REVIEW | | | | |

• Once corrections have be made, the instructing issuer can review its issuance operation that will appear in the 4 eyes process tab with "WAITING_FOR_APPROVAL" status and enter the 4 eyes process again until its approval (see 4.2.1).

4.3 CBDC transfer

CBDC transfer can be instructed by:

- Dedicated Cash Wallet Manager on a Dedicated Cash Wallet he manages
- Dedicated Cash Wallet Owner on a Dedicated Cash Wallet he owns
- Dedicated Cash Wallet Custodian on behalf of a Dedicated Cash Wallet user

4.3.1 CBDC transfer instructed by a Dedicated Cash Wallet manager

 One needs to connect as a *Dedicated Cash Wallet manager* and to click on the *managed* tab in CBDC Operations tab.



| BANQUE DE FRANCE Eurosystème | DL3S | | | | Monetary strategy Financial stability | Economic services | | Caler Busir | ndar date 11-20-2023 ness date 12-31-2022 | 12:19:45 Singleus Dedicated Dedicated (+2) | er @ BDF I Cash Wallet Owner I Cash Wallet Manag |
|---|--------------------|-------------------------------------|-------------|-----------|--|----------------------|-------------------------------------|----------------------------|--|---|--|
| ⑦ Dashboard | CBDC | | | | | | | | | | |
| Dedicated Cash Wallets | CBD | C Operatio | ons - mana | aged | | | | | | Create a CBDC Op | eration |
| T2 accounts | | | | | | | | | | | |
| CBDC Operations | Owned | | • | | | | | | | | |
| n Global | Managed | peration ID | ¢ Status | ¢ Type | ♦ Accepted Timestamp | ¢ Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amou |
| External network Reporting | Issued National | SURE_3572720a- 05-bd85- c4d1 | SETTLED | Redeem | 11-16-2023 18:36:03 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | |
| Parameters | 4 eyes process | SURE_7136729c- 7c-9f1f- 4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | |
| | tran | isfer pbs_pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | |
| | tran | sfer_pbg_pbb | SETTLED | Transfer | 11-15-2023 13:45:40 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | |
| | tran | sfer_pbg_pbs | SETTLED | Transfer | 11-15-2023 13:45:05 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBS_WALLET | BDFEFR2TXXX | |
| | tran | isfer_pbs_pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | |
| | | | | | | | | | | | Þ |
| | | | | | | | | | | | |

• By clicking on the *Create a CBDC Operation* button, one has to fill in: New CBDC operation

| PARTIES | | | |
|---|--|--------------------------|-------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| transfer-pbswallet001_pbgwallet001_20232011122026 | TRANSFER | BDF | BDFEFR2TXXX |
| External network * | | | |
| 🔿 Yes 💿 No | | | |
| DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| PBG_WALLET_001 | BDFEFR2TXXX | | |
| | | | |
| TRANSFER | | | |
| Amount * Currency | * | | |
| 150 Euro | ~ | | |

CANCEL SUBMIT

- CBDC Operation ID, it is to be unique. Commonly the form is TRANSFER_debited wallet alias_credited wallet alias_date&time. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- Type is transfer
- o Instructing party name, the name of the party instructing the transfer
- Instructing party BIC, the BIC of the party instructing the transfer
- o Eternal button should be no has the transfer happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias



- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- *Credited Dedicated Cash Wallet Manager BIC* corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance

 \sim

- o Currency corresponds to the currency of the CBDC transferred
- The transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".
 CBDC Operations managed

| ¢ CBDC Operation ID | ¢ Status | ¢ Type | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amount | ÷ Currency |
|---|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-------------|---------------|
| transfer- pbswallet001_pbgwallet001_20232011122026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 150 | EUR |
| BD_CLOSURE_7136729c-ab17-447c-9f1f- 2cc04de4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 2156 | EUR |
| BD_CLOSURE_3572720a-198a-4405-bd85- 1f1f1f0cc4d1 | SETTLED | Redeem | 11-16-2023 18:36:03 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 169908 | EUR |
| transfer pbs_pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 1 200 | EUR |
| transfer_pbs_pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 45 000 | EUR |
| transfer_pbg_pbb | SETTLED | Transfer | 11-15-2023 13:45:40 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 13500 | EUR |
| transfer_pbg_pbs | SETTLED | Transfer | 11-15-2023 13:45:05 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBS_WALLET | BDFEFR2TXXX | 15000 | EUR |

• The manager can check in the *Dedicated Cash Wallet managed* tab that wallets have been correctly debited and credited or by checking wallet's movement history.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monetary strategy Financial stability | Economic services | Calendar Business | date 11-20-2023 date 12-31-2022 | 12:23:03 sin Dec Dec +2 | gleuser @ BDF dicated Cash Wallet Owner dicated Cash Wallet Manager 온 |
|---|------------------------|-------------------------|--|----------------------|----------------------|------------------------------------|----------------------------------|---|
| ⊘ Dashboard | Dedicated Cash Wallets | | | | | | | |
| Dedicated Cash Wallets | Dedicated C | ash Walle | ts - managec | I | | | Create a Dedic | ated Cash wallet |
| T2 accounts | | | | | | | | |
| B CBDC Operations | | | | Standard Issuar | nce | | | |
| ក្នំ Global | Wallet ID | T2 Account Reference | ◆ Wallet Alias | ◆ Owner BIC | ♦ Owner Name | ♦ Currency | ◆ Availat | ble 🗢 Count |
| ក្ខំ External network | PBG_WALLET_001 | FRT2PBG001 | PBG_WALLET_001 | PBGSGGXXDLT | PBG client | EUR | 150 | FR |
| Reporting | PBG_WALLET_002 | FRT2PBG001 | PBG_WALLET_002 | PBGSGGXXDLT | PBG | EUR | | FR |
| (2) Parameters | PBS_WALLET_001 | FRT2PBS001 | PBS_WALLET_001 | PBSOFRXXDLT | PBS client | EUR | 2850 | FR |
| | | | | | | | | Þ |



PBG

| Cash Wallet | PBG_WALLET_001 |
|--------------|----------------|
| Owner BIC | PBGSGGXXDLT |
| Currency | EUR |
| T2 Account | FRT2PBG001 |
| Country Code | FR |
| Manager BIC | BDFEFR2TXXX |

| Instruction ID | Operation Type | Amount | Date/Time | Counterpar |
|---|----------------|---------|------------------------|------------|
| transfer- pbswallet001_pbgwallet001_20232011122026 | TRANSFER | +150 | 11-20-2023 12:21:33 | |
| BD_CLOSURE_3572720a-198a-4405-bd85- 1f1f1f0cc4d1 | REDEEM | -169908 | 11-16-2023 18:36:38 | |
| transfer_pbs_pbg | TRANSFER | +45000 | 11-15-2023 13:46:39 | |
| transfer_pbg_pbb | TRANSFER | -13500 | 11-15-2023 13:46:02 | |
| transfer_pbg_pbs | TRANSFER | -15000 | 11-15-2023 13:45:27 | |
| transfer_pbb_pbg | TRANSFER | +3408 | 11-15-2023 13:44:12 | |
| issuance_PBG | ISSUANCE | +150000 | 11-15-2023 10:55:48 | |
| | | | | • |
| Balance | | | | 150 EUR |

4.3.2 CBDC transfer instructed by a Dedicated Cash Wallet owner

• The flow is exactly the same unless the **Dedicated Cash Wallet owner** accesses the *create a CBDC* operation button in the owned – CBDC operation tab.

| B/ | ANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financial stability | Econon services | Calendar dat Business dat | e 11-20-2023 12:25:2 e 12-31-2022 | 1 singleuser @ PE Dedicated Cash Wa Dedicated Cash Wa | 3S allet Owner allet Custodian | 2 |
|----|--------------------------------|-------|---------------------------|---------------------------|--|--------------------|------------------------------|--------------------------------------|---|---|---|
| Ø | Dashboard | C | CBDC | | | | | | | | |
| Ó | Dedicated Cash Wallets | | CBDC Op | erations - ow | ned | | | | Create a CBDC Ope | ration | |
| Ó | T2 accounts | | | | | | | | | | |
| ₽ | CBDC Operations | Owned | I | • | | | | | | | |
| î | Global | Manag | jed | ion ID | \$ | Status | \$ Type | ♦ Accepted Timestamp | Creation Date | Debit Dedic | |
| i | External network | | BD_CLOSURE | _7136729c-ab17-447c-9f1f- | | SETTLED | Redeem | 11-16-2023 | 12-31-2022 | PBS V | |
| ð | User administration | | 2cc04de4aca | e | | | Transfer | 18:36:06 | 12-21-2022 | | |
| Ø | Parameters | | transier pbs_ | μου | | SETTLED | Tansier | 13:47:03 | 12-51-2022 | PD3_V | |
| | | | transfer- pbswallet001 | _pbgwallet001_2023201112 | 22026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_V | |
| | | | transfer_pbs_ | pbg | | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_V | |
| | | | | | | | | | | | |

• The Dedicated Cash Wallet has to fill in the form:



New CBDC operation

| PARTIES | | | | |
|--|--|--|--------------------------|-------------------------|
| CBDC Operation ID * TRANSFER_PSSWALLETOD _PBOWALLETOD _B0022 TRANSFER_PSSWALLETOD _PBOWALLETOD _B0022 On Behalf Client Entity ID Contended Cash Wallet * PS No | PARTIES | | | |
| TRANSFER, PBSWALLET001_PBGWALLET001_20232 TRANSFER PBS PBSOFRXXQLT On Behalf Client Entity ID External network* Y Yes No DEDICATED CASH WALLETS Debited Dedicated Cash Wallet Manager BIC* PBS_WALLET_001 BDFFR2TXXX Credited Dedicated Cash Wallet Manager BIC* BDFFR2TXXX BDFFR2TXXX External network* Credited Dedicated Cash Wallet Manager BIC* BDFFR2TXXX BDFFR2TXXX TRANSFER Anount* Currency* T0 External network* T0 External network | CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| On Behalf Client Entity ID External network * ✓ Yes ● No DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * PBS_WALLET_001 Credited Dedicated Cash Wallet * PBS_WALLET_001 Credited Dedicated Cash Wallet * PBS_WALLET_001 Credited Dedicated Cash Wallet Manager BIC * BPGFFR2TXXX SPGFFR2TXXX TRANSFER Mount * Currency * 100 Euro | TRANSFER_PBSWALLET001_PBGWALLET001_20232 | | PBS | PBSOFRXXDLT |
| External network * Ves No DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * Pes_walleT_oo1 EDEFFRETXXX Credited Dedicated Cash Wallet * Pes_WalleT_oo1 Credited Dedicated Cash Wallet Manager BIC * Pes_WalleT_oo1 EDEFFRETXXX TRANSFER Amount * Currency * 100 Euro V | On Behalf Client Entity ID | | | |
| External network* Ves No DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet * BDFEFR2TXXX Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet * BDFEFR2TXXX BDFEFR2TXXX TRANSFER Amount * Currency * 100 Euro | | | | |
| Debited Dedicated Cash Wallet * Credited Dedicated Cash Wallet * BDFEFR2TXXX TRANSFER Amount * Currency * 100 V | | | | |
| Ves ● No DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * PBS_WALLET_001 BDFEFR2TXXX Credited Dedicated Cash Wallet Manager BIC * PBG_WALLET_001 BDFEFR2TXXX TRANSFER Amount * Currency * 100 Euro | External network * | | | |
| DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * PBS_WALLET_001 BDFEFR2TXXX Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * PBG_WALLET_001 BDFEFR2TXXX BDFEFR2TXXX BDFEFR2TXXX TRANSFER Amount * Currency * V | 🔵 Yes 💿 No | | | |
| DEDICATED CASH WALLETS Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * PBS_WALLET_001 BDFEFR2TXXX Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * PBG_WALLET_001 BDFEFR2TXXX TRANSFER Amount * Currency * Image: Super state st | | | | |
| Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * BPS_WALLET_001 Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * BDFEFR2TXXX BDFEFR2TXXX BDFEFR2TXXX TRANSFER TRANSFER Tugo Euro Euro V | DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * PBS_WALLET_001 BDFEFR2TXXX Credited Dedicated Cash Wallet Manager BIC * PBG_WALLET_001 BDFEFR2TXXX BDFEFR | | | | |
| PBS_WALLET_001 BDFEFR2TXXX Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * PBG_WALLET_001 BDFEFR2TXXX | Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * PBg_WALLET_001 BDFEFR2TXXX BDFEFR2TXXX TRANSFER Amount * Currency * 100 Euro | PBS_WALLET_001 | BDFEFR2TXXX | | |
| Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * BDFEFR2TXXX BDFEFR2TXXX TRANSFER Amount * Currency * 100 Euro | | | | |
| PB0_WALLET_001 EDFEFR2TXXX TRANSFER Amount * Currency * 100 Euro | Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| TRANSFER Amount * Currency * T00 Euro V | PBG_WALLET_001 | BDFEFR2TXXX | | |
| Amount * Currency * 100 Euro ✓ | | | | |
| Amount * Currency * | TRANSFER | | | |
| 100 Euro V | Amount * Currency * | | | |
| | 100 Euro | ~ | | |
| | | | | |

* Required Field

CANCEL SUBMIT

- CBDC Operation ID, it is to be unique. Commonly the form is TRANSFER_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- Type is transfer
- o Instructing party name, the name of the party instructing the transfer
- Instructing party BIC, the BIC of the party instructing the transfer
- On behalf Client Entity ID should not be filled as the party is instructed on its own name
- o External button should be no has the transfer happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- *Credited Dedicated Cash Wallet Manager BIC* corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- Currency corresponds to the currency of the CBDC transferred
- The transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".



| CBDC Operations - owned | | | | | | | | C | eate a CBDC Operation | • |
|---|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-----------------------|---|
| Туре • | | | | | | | | | | |
| CBDC Operation ID | ≑ Status | ¢ Туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ≑ Amount | ÷ |
| TRANSFER_PBSWALLET001_PBGWALLET001_20232011122632 | SETTLED | Transfer | 11-20-2023 12:27:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 100 | ŧ |
| transfer-pbswallet001_pbgwallet001_20232011122026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 150 | ŧ |
| BD_CLOSURE_7136729c-ab17-447c-9f1f-2cc04de4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 2156 | ŧ |
| transfer pbs_pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 1 200 | E |
| transfer_pbs_pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 45 000 | ŧ |
| | | | | | | | | | _ | Þ |

• **Dedicated Cash Wallet owners** can control on their respective wallets that the correct amount has been credited or debited.

4.3.3 CBDC transfer instructed by a Dedicated Cash Wallet custodian on behalf of a Dedicated Cash Wallet user

- The *Dedicated Cash Wallet custodian* accesses the *create a CBDC operation* button in the *managed CBDC operation* tab.
- One has to fill in the form: New CBDC operation

| PARTIES | | | |
|---|--|--------------------------|-------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| tmasfer_pbgcli1wallet001_pbswallet001_2023201113443 | TRANSFER | PBG | PBGSGGXXDLT |
| On Behalf Client Entity ID | | | |
| 00CLI1PBGINVESTOR00000001 | | | |
| | | | |
| External network * | | | |
| 🔿 Yes 🖲 No | | | |
| | | | |
| DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| PBG_CLI1_WALLET_001 | PBGSGGXXDLT | | |
| | | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | |
| | | | |
| TDANSEED | | | |
| TRANSFER | | | |
| Amount * Currency * | | | |
| 10 Euro | ~ | | |
| | | | |

- CBDC Operation ID, it is to be unique. Commonly the form is TRANSFER_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- Type is transfer

.



- Instructing party name, the name of the party instructing the transfer
- Instructing party BIC, the BIC of the party instructing the transfer
- On behalf Client Entity ID corresponds to the LEI of the client
- o Eternal button should be no has the transfer happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- *Credited Dedicated Cash Wallet Manager BIC* corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- Currency corresponds to the currency of the CBDC transferred
- The transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED". CBDC Operations - managed

| Туре | | | | | | | | | | |
|--|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-------------|------|
| CBDC Operation ID | ¢ Status | ¢ Туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ≑ Amount | ¢ Cu |
| tmasfer_pbgcli1wallet001_pbswallet001_20232011134431 | SETTLED | Transfer | 11-20-2023 13:45:59 | 12-31-2022 | PBG_CLI1_W | PBGSGGXXDLT | PBS_WALLET | BDFEFR2TXXX | 10 | EU |
| • | | | | | | | | | _ | Þ |

• Dedicated Cash Wallet user can control its wallets has been debited of the correct amount.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Fina | ancial | | | | | Calendar date 11-20 Business date 12-31 | -2023 13:47:46 -2022 | pbg-cli1 @ PBG-CLI1 @ PBC Dedicated Cash Wallet User 온 |
|--|-------------|------------------------|--------------------------------------|--------------------|----------------|-----------------|---------------------|----------------|--------------------|--|-------------------------|---|
| ② Dashboard | | Dedicated Cash Wallets | | | | | | | | | | |
| Dedicated Cash Wallets | | Dedicated Cash V | Wallets - used | | | | | | | | | |
| BCBDC Operations | | | | | | Standard Issuan | 28 | | | | | |
| 🖞 Global | | | | | | | | | | | | |
| Parameters | | Wallet ID | Wallet Alias | Manager BIC | \$ Mani | ager Name | Currency | Available | \$ Co | ountry Code | Token Deta | nils |
| | PBG | | Movement history | | | | | | | | × | |
| | Cash Wallet | PBG_CLI1_WALLET_001 | | | | | | | | | | |
| | Owner BIC | PBGSGGXXDLT | Instruction ID | | Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Mana | iger BIC | |
| | Currency | EUR | trnasfer_pbgcli1wallet001_pbswallet0 | 001_20232011134431 | TRANSFER | +100 | 11-20-2023 13:46:21 | | PBS_WALLET_001 | BDFEFR2TXXX BDEFER2TXXX | | |
| | Manager BIC | PBGSGGXXDLT | | | | | | | | | | |
| | | | Balance | | | | | | | | 90 EUR | |
| | | | | | | | | | | | | |

4.4 CBDC redemption

CBDC redemption can be instructed by:

- Dedicated Cash Wallet manager on a wallet he manages
- Dedicated Cash Wallet owner on a wallet he owns
- Dedicated Cash Wallet custodian on be behalf of the Dedicated Cash Wallet user

4.4.1 CBDC redemption instructed by a Dedicated Cash Wallet manager

 One needs to connect as a *Dedicated Cash Wallet manager* and to click on the *managed* tab in CBDC Operations tab.


• By clicking on the *Create a CBDC Operation* button, one has to fill in: New CBDC operation

| PARTIES | | | |
|---|--|--------------------------|-------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| REDEEM_PBSWALLET001_EURTRANSIT_2023201113 | REDEEM | BDF | BDFEFR2TXXX |
| External network * | | | |
| 🔿 Yes 🖲 No | | | |
| DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| EUR_TRANSIT | CBCONSPPXXX | | |
| | | | |
| TRANSFER | | | |
| Amount * Currency * | | | |
| 50 Euro | ~ | | |

CANCEL SUBMIT

- CBDC Operation ID, it is to be unique. Commonly the form is REDEEM_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- o Type is redeem
- o Instructing party name, the name of the party instructing the transfer
- o Instructing party BIC, the BIC of the party instructing the transfer
- Eternal button should be no has the transfer happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- Credited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- o Currency corresponds to the currency of the CBDC transferred
- The redemption appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".

| CBDC Operations - managed | | | | | | | | Creat | e a CBDC Operation |
|---|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|--------------------|
| Туре | | | | | | | | | |
| CBDC Operation ID | ¢ Status | ¢ Туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amount |
| REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | SETTLED | Redeem | 11-20-2023 13:51:26 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 5 |
| | | | | | | | | | |



• The manager can check in the *Dedicated Cash Wallet managed* tab that the correct amount has been redeemed from the wallets.

| PBS | | Movement history | | | | | | |
|--------------|----------------|---|----------------|---------|---------------------|----------------|---------------------|------------------------|
| Cash Wallet | PBS_WALLET_001 | | | | | | | |
| Owner BIC | PBSOFRXXDLT | Instruction ID | Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manager Bl |
| Currency | EUR | REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | REDEEM | -50 | 11-20-2023 13:51:47 | | EUR_TRANSIT | CBCONSPPXXX |
| T2 Account | FRT2PBS001 | trnasfer_pbgcli1wallet001_pbswallet001_20232011134431 | TRANSFER | +10 | 11-20-2023 13:46:28 | | PBG_CLI1_WALLET_001 | PBGSGGXXDLT |
| Country Code | 50 | π | TRANSFER | -100 | 11-20-2023 12:34:02 | | PBS_CLI1_WALLET_005 | PBSOFRXXDLT |
| country code | FR | TRANSFER_PBSWALLET001_PBGWALLET001_20232011122632 | TRANSFER | -100 | 11-20-2023 12:28:03 | | PBG_WALLET_001 | BDFEFR2TXXX |
| Manager BIC | BDFEFR2TXXX | transfer-pbswallet001_pbgwallet001_20232011122026 | TRANSFER | -150 | 11-20-2023 12:21:33 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | | issuance_EURTRANSIT_PBSWALLET001_20232011112425 | ISSUANCE | +2000 | 11-20-2023 11:29:11 | | EUR_TRANSIT | CBCONSPPXXX |
| | | issusance -pbs2 | ISSUANCE | +1 000 | 11-20-2023 10:22:41 | | EUR_TRANSIT | CBCONSPPXXX |
| | | BD_CLOSURE_7136729c-ab17-447c-9f1f-2cc04de4acae | REDEEM | -2156 | 11-16-2023 18:36:43 | | EUR_TRANSIT | CBCONSPRIM |
| | | Trade-htlc-pbs-pbb-secret-1611bis_RECE | DVP | -50 000 | 11-16-2023 16:32:32 | | | PBGSGGXXDLT |
| | | Trade-htlc-pbs-pbb-secret-1611_RECE | DVP | -50 000 | 11-16-2023 16:30:30 | | | PBGSGGXXDLT |
| | | transfer pbs_pbb | TRANSFER | -1 200 | 11-15-2023 13:47:24 | | PBB_WALLET_001 | CBLXLLXXDLT |
| | | transfer_pbs_pbg | TRANSFER | -45 000 | 11-15-2023 13:46:39 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | | transfer_pbg_pbs | TRANSFER | +15000 | 11-15-2023 13:45:27 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | | transfer_pbb_pbs | TRANSFER | +4356 | 11-15-2023 13:44:39 | | PBB_WALLET_001 | CBLXLLXXDLT |
| | | Trade-htlc-pbs-pbb-secret-1511tiers_RECE | DVP | -5000 | 11-15-2023 12:09:28 | | | PBGSGGXXDLT |
| | | Trade-htlc-pbs-pbb1511_RECE | DVP | -100000 | 11-15-2023 12:02:46 | | | PBGSGGXXDLT |
| | | ISSUANCE_PBS | ISSUANCE | +234000 | 11-15-2023 10:55:48 | | EUR_TRANSIT | CBCONSPPXXX |
| | | Balance | | | | | | 2610 EU |

4.4.2 CBDC redemption instructed by a Dedicated Cash Wallet owner

• The flow is exactly the same unless the Dedicated Cash Wallet owner accesses the create a CBDC operation button in the *owned – CBDC operation* tab.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financial stability | 50 | Economic rvices | | | Calendar dat Business date | e 11-20-2023 13:59:06 e 12-31-2022 | singleuser @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodiar | ٤, |
|---------------------------------|---------|---|-------------|--|------------------------|--------------------|-------------------------------------|----------------------------|--------------------------------------|---------------------------------------|--|----|
| Ø Dashboard | | CBDC | | | | | | | | | | |
| Dedicated Cash Wallets | | CBDC Operations - owned | | | | | | | | Create a | CBDC Operation | |
| 🖆 T2 accounts | | | | | | | | | | | | |
| d CBDC Operations | Owned | • | | | | | | | | | | |
| 🛔 Global | Managed | C Operation ID | ≑ Status | ¢ Туре | | ¢ Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | + Manager BIC Credited DCW | ¢ Amount | |
| ំ External network | | BD_CLOSURE_7136729c-ab17-447c-9f1f-2cc04de4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 2156 | |
| 路, User administration | | REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | SETTLED | Redeem | 11-20-2023 13:51:26 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 50 | |
| Parameters | | TRANSFER_PB5WALLET001_PBGWALLET001_20232011122632 | SETTLED | Transfer | 11-20-2023 12:27:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 100 | |
| | | π | SETTLED | Transfer | 11-20-2023 12:33:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBS_CLI1_W | PBSOFRXXDLT | 100 | |
| | | transfer pbs_pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 1 200 | |
| | | transfer-pbswallet001_pbgwallet001_20232011122026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 150 | |
| | | transfer_pbs_pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 45 000 | |
| | | | | | | | | | | | Þ | |
| | | | | | | | | | | | | |

• The Dedicated Cash Wallet owner has to fill in the form:



New CBDC operation

CANCEL SUBMIT

| PARTIES | | | | |
|---|--|--------------------------|-------------------------|----------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * | On Behalf Client Entity ID |
| REDEEM_PBSWALLET001_EURTRANSIT_2023201114 | | PBS | PBSOFRXXDLT | |
| External national + | | | | |
| Yes No | | | | |
| | | | | |
| DEDICATED CASH WALLETS | | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | | |
| PBS_WALLET_001 | BDFEFR2TXXX | | | |
| | | | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | | |
| EUR_TRANSIT | CBCONSPPXXX | | | |
| | | | | |
| TRANSFER | | | | |
| Amount * Currency * | * | | | |
| 200 Euro | ~ | | | |
| Required Field | | | | |
| | | | | |

- CBDC Operation ID, it is to be unique. Commonly the form is REDEEM_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- o Type is redeem
- o Instructing party name, the name of the party instructing the transfer
- Instructing party BIC, the BIC of the party instructing the transfer
- On behalf Client Entity ID should not be filled as the party is instructed on its own name
- External button should be no has the redemption happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- Credited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- Currency corresponds to the currency of the CBDC transferred
- The transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".
 CBDC Operations owned

| Т | уре | | | | | | | | | |
|---|---|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-------------|
| | CBDC Operation ID | ¢ Status | ≑ Туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amount |
| | REDEEM_PBSWALLET001_EURTRANSIT_20232011140005 | SETTLED | Redeem | 11-20-2023 14:00:49 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSI | CBCONSPPXXX | 200 |

• **Dedicated Cash Wallet owners** can control on its wallets that the correct amount has been redeemed.



4.4.3 CBDC redemption instructed by a Dedicated Cash Wallet custodian on behalf of a Dedicated Cash Wallet user

- The Dedicated Cash Wallet custodian accesses the create a CBDC operation button in the owned CBDC operation tab.
- One has to fill in the form:

New CBDC operation

| PARTIES | | | | |
|--|--|--------------------------|-------------------------|----------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * | On Behalf Client Entity ID |
| redeem_pbgcli1wallet001_eurtransit_2023201114034 | REDEEM | ♥ PBG | PBGSGGXXDLT | 00CLI1PBGINVESTOR00000001 |
| External network * | | | | |
| 🔿 Yes 💿 No | | | | |
| DEDICATED CASH WALLETS | | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager | BIC * | | |
| PBG_CLI1_WALLET_001 | PBGSGGXXDLT | | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager | BIC * | | |
| EUR_TRANSIT | CBCONSPEXXX | | | |
| | | | | |
| TRANSFER | | | | |
| Amount * Curre | ncy * | | | |
| 50 Euro | ~ | | | |

CANCEL SUBMIT

- CBDC Operation ID, it is to be unique. Commonly the form is REDEEM_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- *Type* is redeem
- Instructing party name, the name of the party instructing the transfer
- o Instructing party BIC, the BIC of the party instructing the transfer
- o On behalf Client Entity ID corresponds to the LEI of the client
- o External button should be no has the transfer happens on DL3S platform
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- Credited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- Amount corresponds amount of the issuance
- o Currency corresponds to the currency of the CBDC transferred
- The redemption appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED". CBDC Operations - managed

| ¢ c | BDC Operation ID | ≑ Status | ¢ Туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ¢ Amount | ÷ |
|-----|--|--------------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-------------|---|
| n | edeem_pbgcli1wallet001_eurtransit_20232011140348 | SETTLED | Redeem | 11-20-2023 14:04:44 | 12-31-2022 | PBG_CLI1_W | PBGSGGXXDLT | EUR_TRANSI | CBCONSPPXXX | 50 | |

•

Туре



• Dedicated Cash Wallet user can control its wallets has been debited of the correct amount.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monet strategy Fina | ancial stability | | | | | Calendar date 11-20- Business date 12-31- | 2023 14:05:59 2022 | pbg-cli1 @ PBG-CLI1 @ PBG Dedicated Cash Wallet User & |
|---------------------------------|-------------|------------------------|--------------------------------------|---------------------------|---------------------|-----------------|---------------------|----------------|--------------------|--|-----------------------|---|
| ② Dashboard | | Dedicated Cash Wallets | | | | | | | | | | |
| Dedicated Cash Wallets | | Dedicated Cash | Wallets - used | | | | | | | | | |
| GBDC Operations | | | | | | Standard Issuar | ce | | | | | |
| n Global | | | | | | | | | | | | |
| Parameters | | Wallet ID | Wallet Alias | Manager BIC | \$ Mana | ger Name | Currency | Available | \$ Cc | ountry Code | Token Deta | aits |
| | PBG | | Movement history | | | | | | | | × | |
| | Cash Wallet | PBG_CLI1_WALLET_001 | | | | | | | | | | |
| | Owner BIC | PBGSGGXXDLT | Instruction ID | | Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manag | ger BIC | |
| | Currency | EUR | redeem_pbgcli1wallet001_eurtransit_2 | 0232011140348 | REDEEM | -50 | 11-20-2023 14:05:06 | | EUR_TRANSIT | CBCONSPPXXX | | |
| | Manager BIC | PBGSGGXXDLT | tt | 1_20232011134431 | TRANSFER | +100 | 11-20-2023 13:42:53 | | PBG_WALLET_001 | BDFEFR2TXXX | | |
| | | | Balance | | | | | | | | 40 EUR | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

4.5 Monitoring and reporting

A DL3S participant (*Dedicated Cash Wallet owner, Dedicated Cash Wallet custodian* or *Dedicated Cash Wallet owner*) can monitor his wallets or his operation and can also access the status of his operations during their lifecycle.

4.5.1 Monitoring

• The number and the list of Dedicated Cash Wallets owned or managed are available on the dashboard. In case of a *Dedicated Cash Wallet user*, only the number of Dedicated Cash Wallets used is available.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Finandial stability | Economic services | Calendar date 11-20-2023 14:11:38 Business date 12-31-2022 | singleuser @ PBG Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodia |
|---|------|--|----------------------|---|---|
| ② Dashboard | | 2 | | 2 | |
| Dedicated Cash Wallets | | Dedicated Cash wallets managed | P | CBDC transfer settled | |
| T2 accounts | | | | | |
| CBDC Operations | | ~ 2 | | | |
| ក្នំ Global | | Dedicated Cash wallets owned | | | |
| n External network | | | | | |
| 꼸 User administration | | Dedicated Cash Wallets | | | |
| Parameters | | OWNED MANAGED | | | |
| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Financial solarity | Economic services | Calendar date 11-20-2023 14:12:07 Business date 12-31-2022 | p bg-cli1 @ PBG-CLI1 @ PBG Dedicated Cash Wallet User 온 |
| ② Dashboard | | | | | |
| Dedicated Cash Wallets | | Dedicated Cash wallets used | | | |
| GBDC Operations | | | | | |
| n Global | | | | | |
| | | | | | |



• By clicking on the *Dedicated Cash Wallets* tab, one will access to more detailed information about his owned, managed or used wallets.



Dedicated Cash Wallets

Dedicated Cash Wallets - owned

Create a Dedicated Cash wallet

| Wallet ID | T2 Account Reference | 🗢 Wallet Alias | Manager BIC | Manager Name | Currency | 🗢 Available | Country Code | Token Details |
|----------------|----------------------|----------------|-------------|--------------|----------|-------------|--------------|---------------|
| PBS_WALLET_001 | FRT2PB5001 | PB5_WALLET_001 | BDFEFR2TXXX | BDF | EUR | 2410 | FR | See Details |

Standard Issuance

- Information available are:
- Wallet ID column corresponds to the technical identity of the wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the wallet on DL3S platform
- Owner BIC corresponds to the BIC of the owner of the wallet
- Owner Name corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S
- Currency corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens holded in the wallet. At first, when the wallet is empty, it contains no data.
- By clicking on the wallet alias, the participant has access to the movement history of the Dedicated Cash Wallet managed. Each instruction on the Dedicated Cash Wallet is registered with the date and time, the counterpart (accordingly to operations' type privacy requirements), the amount of the transaction and the ID instruction. The participant can also check the balance of the wallet.



PBG

Cash Wallet Owner BIC Currency T2 Account Country Code Manager BIC

PBG_WALLET_001

PBGSGGXXDLT

FRT2PBG001

BDFEFR2TXXX

EUR

FR

| Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manager Bl |
|----------------|--|--|---|--|--|
| TRANSFER | -100 | 11-20-2023 13:42:47 | | PBG_CLI1_WALLET_001 | PBGSGGXXDLT |
| TRANSFER | +100 | 11-20-2023 12:28:03 | | PBS_WALLET_001 | BDFEFR2TXXX |
| TRANSFER | +150 | 11-20-2023 12:21:33 | | PBS_WALLET_001 | BDFEFR2TXXX |
| REDEEM | -169908 | 11-16-2023 18:36:38 | | EUR_TRANSIT | CBCONSPPXXX |
| TRANSFER | +45 000 | 11-15-2023 13:46:39 | | PBS_WALLET_001 | BDFEFR2TXXX |
| TRANSFER | -13500 | 11-15-2023 13:46:02 | | PBB_WALLET_001 | CBLXLLXXDLT |
| TRANSFER | -15000 | 11-15-2023 13:45:27 | | PBS_WALLET_001 | BDFEFR2TXXX |
| TRANSFER | +3408 | 11-15-2023 13:44:12 | | PBB_WALLET_001 | CBLXLLXXDLT |
| ISSUANCE | +150 000 | 11-15-2023 10:55:48 | | EUR_TRANSIT | CBCONSPPXXX |
| | | | | | |
| | Operation Type TRANSFER TRANSFER REDEEM TRANSFER TRANSFER TRANSFER TRANSFER ISSUANCE | Operation Type Amount TRAINSFER 100 TRAINSFER +100 TRAINSFER +150 REDEEM -169908 TRAINSFER +15000 TRAINSFER -13500 TRAINSFER -15000 TRAINSFER -9408 ISSUANCE +150000 | Operation Type Amount Date/Time TRAINSFER -100 11-20-2023 12:42:47 TRAINSFER -100 11-20-2023 12:28:03 TRAINSFER +150 11-20-2023 12:28:03 TRAINSFER +150 11-20-2023 12:21:33 REDEEM -169908 11-15-2023 13:46:39 TRAINSFER -45000 11-15-2023 13:46:39 TRAINSFER -15000 11-15-2023 13:46:32 TRAINSFER -15000 11-15-2023 13:46:32 TRAINSFER -15000 11-15-2023 13:46:32 TRAINSFER -15000 11-15-2023 13:45:27 TRAINSFER -15000 11-15-2023 13:45:27 TRAINSFER -15000 11-15-2023 13:45:27 | Operation Type Anount Date/Time Counterpart ID TRANSFER -100 11-20-2023 13:42:47 TRANSFER 1100 TRANSFER +100 11-20-2023 13:42:47 TRANSFER 112:00-2023 13:42:47 TRANSFER +150 11-20-2023 12:22:803 TRANSFER 150 TRANSFER TRANSFER -169:008 11-16-2023 13:46:39 TRANSFER -13:500 11-15-2023 13:46:39 TRANSFER -15:000 11-15-2023 13:46:39 TRANSFER -15:000 TRANSFER -15:000 11-15-2023 13:46:39 TRANSFER -15:000 TRANSFER -15:000 11-15-2023 13:46:39 TRANSFER -15:000 TRANSFER +15:000 11-15-2023 13:46:39 TRANSFER -15:000 | Operation Type Amount Date/Time Counterpart ID Counterpart ID |

4.5.2 Reporting

• An operation can have different status:

Movement history

- Settled: the operation is successful
- Unsettled: the operation failed for eligibility reasons
- Waiting_for_approval: the operation needs to be approved in the 4-eyes process
- To_Be_Reviewed: the operation has been disapproved in the 4-eyes process and needs to be reviewed
- o Accepted: the operation has been correctly submitted and is being processed
- For or *Dedicated Cash Wallet manager*, the number of CBDC operations settled managed is available on the dashboard.

| BA | ANQUE DE FRANCE EUROSYSTÈME | DL3S | | Monetary strategy Financial stability | | Calendar date 11-20-2023 14:17:12 Business date 12-31-2022 | singleuser @ BDF Dedicated Cash Wallet C Dedicated Cash Wallet N +2 |)wner Manager 🖧 |
|----|--------------------------------|------|-------------------------------|--|---|---|--|--------------------|
| Ø | Dashboard | | | | | | | |
| Ó | Dedicated Cash Wallets | C | Dedicated Cash wallets manage | d | P | 12 CBDC transfer settled | | |
| Ó | T2 accounts | | | | | | | |
| ₽ | CBDC Operations | | 0 | | 7 | 2700 € | | |
| ñ | Global | | Dedicated Cash wallets owned | | | Total outstanding amount | | |
| ñ | External network | | | | | | | |
| Ø | Reporting | Dedi | cated Cash Wallets | | | | | |
| Ø | Parameters | 0 | WNED MANAGED | | | | | |

 By clicking on the CBDC operations tab, one will access to more detailed information about his owned, managed or used operation.

| Туре • | | | | | | | | | | |
|---|---------|----------|---------------------|---------------|-------------------------------|-------------------------|--------------------------------|--------------------------|--------|----------|
| CBDC Operation ID | Status | • туре | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | Amount | Currency |
| BD_CLOSURE_3572720a-198a-4405-bd85-1111110cc4d1 | SETTLED | Redeem | 11-16-2023 18:36:03 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPIXIX | 169908 | EUR |
| BD_CLOSURE_7136729c-ab17-447c-9f1f-2cc04de4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPIXIX | 2156 | EUR |
| REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | SETTLED | Redeem | 11-20-2023 13:51:26 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPIXIX | 50 | EUR |
| REDEEM_PBSWALLET001_EURTRANSIT_20232011140005 | SETTLED | Redeem | 11-20-2023 14:00:49 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPIXIX | 200 | EUR |
| TRANSFER_PBSWALLET001_PBGWALLET001_20232011122632 | SETTLED | Transfer | 11-20-2023 12:27:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 100 | EUR |
| π | SETTLED | Transfer | 11-20-2023 12:33:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBS_CLI1_W | PBSOFRXXDLT | 100 | EUR |
| transfer pbs.pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 1200 | EUR |
| transfer-pbswallet001_pbgwallet001_20232011122026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 150 | EUR |
| transfer_pbg.pbb | SETTLED | Transfer | 11-15-2023 13:45:40 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLLXXDLT | 13500 | EUR |
| transfer_pbg.pbs | SETTLED | Transfer | 11-15-2023 13:45:05 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBS_WALLET | BDFEFR2TXXX | 15000 | EUR |
| transfer_pbs_pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PBG_WALLET | BDFEFR2TXXX | 45000 | EUR |
| u | SETTLED | Transfer | 11-20-2023 13:42:25 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBG_CLI1_W | PBGSGGXXDLT | 100 | EUR |

CBDC Operations - managed

Create a CBDC Operation



- Information available are:
- CBDC operation ID column corresponds to the ID of CBDC operations
- Type corresponds to the type of the operation (redeem, transfer or issuance)
- Status column corresponds to the current status of operation
- Accepted timestamps corresponds date and time when the operation has been correctly submitted
- Creation Date corresponds business date
- Debited Dedicated cash Wallet corresponds to the alias of the debited cash wallet
- Manager BIC debited DCW corresponds to BIC of the manager of the debited cash wallet
- Credited Dedicated Cash Wallet corresponds to the name of the credited cash wallet
- Manager BIC Credited DCW corresponds to the BIC of the manager of the credited cash wallet
- Amount corresponds to the amount of the operation
- Currency corresponds to the currency of the operation
- By clicking on the ID instruction, one can have detailed information about the instruction: CBDC operation TRANSFER_PBSWALLET001_PBGWALLET001_2023
 CANCEL
 CANCEL
 CONTENT



- Timeline corresponds to the lifecycle of the instruction
- CB transfer ID corresponds to the ID of the operation
- Type corresponds to the type of the operation among redeem, transfer and issuance
- Status corresponds to the final status of the operation
- Dedicated Cash Wallet corresponds to the wallet of the participant involved in the operation
- Counterpart corresponds to the counterparty of the operation
- Amount corresponds to the amount of the operation
- Currency corresponds to the currency of the operation
- *Percentage* correspond to the percentage of the operation that is settled and below is the corresponding amount settled



4.6 Supervision

4.6.1 Supervised Dedicated Cash Wallets

Supervision of Dedicated Cash Wallets is accessible to *CBDC Supervisor* and *National CBDC supervisor*. *National CBDC Supervisor* can only supervise participant of his jurisdiction whereas *CBDC Supervisor* can supervise every participant.

• For a *CBDC supervisor*, the number and the list of Dedicated Cash Wallets supervised are available on the dashboard.

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | , | Monetary strategy Econom Financial services | Calendar date 11-20-2023 14:21:38 Business date 12-31-2022 | singleuser @ NCBISSUER Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (+2) |
|---------------------------------|------|-----------------------------------|---|---|--|
| ⑦ Dashboard | | | | | |
| Dedicated Cash Wallets | | Dedicated Cash wallets owned | | | |
| T2 accounts | | | | | |
| CBDC Operations | | . 12 | | ~ 22 | |
| <u>ព</u> ំ Global | | Dedicated Cash wallets supervised | Ŀ | CBDC transfer settled | |
| ាំ External network | | | | | |
| Reporting | | Dedicated Cash Wallets | | | |
| Parameters | | OWNED MANAGED SUPERV | ISED | | |

 A National CBDC Supervisor or a CBDC Supervisor can access to more detailed information about wallets they supervised, by clicking on the Supervised tab on Dedicated Cash Wallets tab for the CBDC Supervisor or by clicking on the National Supervised tab on Dedicated Cash Wallets tab for the National CBDC Supervisor

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | s | Monetary trategy Financial stability | Economic services | | | Calendar date 11-20-20 Business date 12-31-20 | 23 14:25:49 22 | singleuser @ NCBISSU Dedicated Cash Wallet Own Dedicated Cash Wallet Man (+2) | R er ager 2 |
|--|--|-------------------------|---|----------------------|-----------|----------|--|-------------------|--|-------------------|
| ② Dashboard | Dedicated Cash Wallets | | | | | | | | | |
| Dedicated Cash Wallets | Dedicated Cash Wallets - super | vised | | | | | | | | |
| T2 accounts | | | Stand | ard Issuance | | | | | | |
| CBDC Operations | | | | | | | | | | |
| n Global | Wallet ID 5 | T2 Account Reference | ♥ Wallet Alias | ♦ Manager BIC | | Currency | ✦ Available | Country C | ode Token l | |
| n External network | PBG_WALLET_001 | FRT2PBG001 | PBG_WALLET_001 | BDFEFR2TXXX | BDF | EUR | 150 | FR | See De | |
| | PBG_WALLET_002 | FRT2PBG001 | PBG_WALLET_002 | BDFEFR2TXXX | BDF | EUR | | FR | See De | |
| Reporting | PBS_WALLET_001 | FRT2PBS001 | PBS_WALLET_001 | BDFEFR2TXXX | BDF | EUR | 2410 | FR | See De | |
| 🕥 Paramatarr | PBG_CLI1_WALLET_001 | FRT2PBG001 | PBG_CLI1_WALLET_001 | PBGSGGXXDLT | PBG | EUR | 40 | FR | See De | |
| (a) Fundamentary | PBG_CLI1_WALLET_002 | FRT2GS001 | PBG_CLI1_WALLET_002 | PBGSGGXXDLT | PBG | EUR | | FR | See De | |
| | PBG_CLI2_WALLET_001 | FRT2PBG001 | PBG_CLI2_WALLET_001 | PBGSGGXXDLT | PBG | EUR | | FR | See De | |
| | PBS_CLI1_WALLET_005 | FRT2PBS001 | PBS_CLI1_WALLET_005 | PBSOFRXXDLT | PBS | EUR | 100 | FR | See De | |
| | PBS_CLI1_WALLET_006 | FRT2PBS001 | PBS_CLI1_WALLET_006 | PBSOFRXXDLT | PBS | EUR | | FR | See Der | |
| | PBS_CLI2_WALLET_001 | FRT2PBS001 | PBS_CLI2_WALLET_001 | PBSOFRXXDLT | PBS | EUR | | FR | See De | |
| | TEST | FRT2PBS001 | TEST | PBSOFRXXDLT | PBS | EUR | | FR | See De | |
| | vx3RD4qxtSyOz0axqryowUzUWJPnUnMh/SMfrGpcbIU= | EUT2CONS001 | EUR_TRANSIT | CBCONSPPXXX | NCBISSUER | EUR | -2 700 | CS | See De | |
| | PBB_WALLET_001 | LLT2PBB001 | PBB_WALLET_001 | CBLXLLXXDLT | CBL | EUR | | LL | See Der | |
| | | | | | | _ | | _ | → | |

- Information available are:
- Wallet ID column corresponds to the technical identity of the Dedicated Cash Wallet in DL3S
- *T2 Account reference* column corresponds to the reference of T2 account the Dedicated Cash Wallet is linked to
- Wallet alias corresponds to name of the wallet on DL3S platform



PBS Cash Wallet Owner BIC Currency T2 Account Country Code Manager BIC

- Manager BIC corresponds to the BIC of the manager of the wallet
- Manager Name corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S
- Currency corresponds to the currency of the Dedicated Cash Wallet in DL3S
- Available corresponds to the amount of CBDC available in the Dedicated Cash Wallet
- Country Code is the jurisdiction code of the participant in DL3S
- *Token details* contains technical details about tokens hold in the wallet. At first, when the wallet is empty, it contains no data.
- By clicking on the wallet alias, *CBDC Supervisor* or *National CBDC Supervisor* have access to the movement history of the wallet supervised. Each instruction on the wallet is registered with the date and time, the counterpart (accordingly to operations' type privacy requirements), the amount of the transaction and the ID instruction. The balance can also be checked the balance of the Dedicated Cash Wallet.

| 05_WALLET_001 | | | | | | | |
|---------------|---|----------------|---------|---------------------|----------------|---------------------|--------------------|
| PBSOFRXXDLT | Instruction ID | Operation Type | Amount | Date/Time | Counterpart ID | Counterpart wallet | Counterpart Manage |
| EUR | REDEEM_PBSWALLET001_EURTRANSIT_20232011140005 | REDEEM | -200 | 11-20-2023 14:01:13 | | EUR_TRANSIT | CBCONSPPXXX |
| FRT2PBS001 | REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | REDEEM | -50 | 11-20-2023 13:51:50 | | EUR_TRANSIT | CBCONSPPXXX |
| 50 | trnasfer_pbgcli1wallet001_pbswallet001_20232011134431 | TRANSFER | +10 | 11-20-2023 13:46:28 | | PBG_CLI1_WALLET_001 | PBGSGGXXDLT |
| FK. | π | TRANSFER | -100 | 11-20-2023 12:34:12 | | PBS_CLI1_WALLET_005 | PBSOFRXXDLT |
| BDFEFR2TXXX | TRANSFER_PBSWALLET001_PBGWALLET001_20232011122632 | TRANSFER | -100 | 11-20-2023 12:28:03 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | transfer-pbswallet001_pbgwallet001_20232011122026 | TRANSFER | -150 | 11-20-2023 12:21:33 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | issuance_EURTRANSIT_PBSWALLET001_20232011112425 | ISSUANCE | +2000 | 11-20-2023 11:29:01 | | EUR_TRANSIT | CBCONSPPXXX |
| | issusance -pbs2 | ISSUANCE | +1 000 | 11-20-2023 10:22:29 | | EUR_TRANSIT | CBCONSPPXXX |
| | BD_CLOSURE_7136729c-ab17-447c-9f1f-2cc04de4acae | REDEEM | -2156 | 11-16-2023 18:36:37 | | EUR_TRANSIT | CBCONSPPXXX |
| | Trade-htlc-pbs-pbb-secret-1611bis_RECE | DVP | -50 000 | 11-16-2023 16:32:32 | | | PBGSGGXXDLT |
| | Trade-htlc-pbs-pbb-secret-1611_RECE | DVP | -50 000 | 11-16-2023 16:30:30 | | | PBGSGGXXDLT |
| | transfer pbs_pbb | TRANSFER | -1 200 | 11-15-2023 13:47:24 | | PBB_WALLET_001 | CBLXLLXXDLT |
| | transfer_pbs_pbg | TRANSFER | -45 000 | 11-15-2023 13:46:39 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | transfer_pbg_pbs | TRANSFER | +15000 | 11-15-2023 13:45:27 | | PBG_WALLET_001 | BDFEFR2TXXX |
| | transfer_pbb_pbs | TRANSFER | +4356 | 11-15-2023 13:44:39 | | PBB_WALLET_001 | CBLXLLXXDLT |
| | Trade-htlc-pbs-pbb-secret-1511tiers_RECE | DVP | -5 000 | 11-15-2023 12:09:28 | | | PBGSGGXXDLT |
| | Trade-htic-pbs-pbb1511_RECE | DVP | -100000 | 11-15-2023 12:02:46 | | | PBGSGGXXDLT |
| | ISSUANCE_PBS | ISSUANCE | +234000 | 11-15-2023 10:55:42 | | EUR_TRANSIT | CBCONSPPXXX |

4.6.2 Operations under NCB jurisdiction

Supervision of CBDC operation is accessible to *CBDC Supervisor* and *National CBDC supervisor*. *National CBDC Supervisor* can only supervise CBDC operations of his jurisdiction whereas *CBDC Supervisor* can supervise every CBDC operation.

A National CBDC Supervisor or a CBDC Supervisor can access to information about CBDC operations of their jurisdiction by clicking on the Supervised tab on CBDC Operations tab for the CBDC Supervisor or by clicking on the National Supervised tab on CBDC Operations tab for the National CBDC Supervisor

| BANQUE DE FRANCE |
|------------------|
| EUROSYSTÈME |

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | | Mon strateg Fir | etary y nancial stability | Economic services | | | | Calendar date 11-20-2023 Business date 12-31-2022 | 4:28:07 Singleuse Dedicated C (-2) |
|--|------|---|----------|----------|-----------------------|------------------------------------|-------------------------------|---------------------------|----------------------------------|---------------------------|--|--|
| | | CEDC | | | | | | | | | | |
| Dedicated Cash Wallets | | CBDC Operations - national super- | vised | | | | | | | | Create | CBDC Operation |
| | | | | | | | | | | | | |
| S CBDC Operations | | Туре • | | | | | | | | | | |
| | | CBDC Operation ID | ≑ Status | * Type | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | * Manager BIC debited DCW | * Credited Dedicated Cash Wallet | * Manager BIC Credited DC | V + Amount | * Currency |
| | | BD_CLOSURE_3572720a-198a-4405-bd85-111110cc4d1 | SETTLED | Redeem | 11-16-2023 18:36:03 | 12-31-2022 | POG_WALLET | BDFEFR2TXXX | EUR_TRANSL | CBCONSPPXXX | 169908 | EUR |
| CALEMA REWORK | | BD_CL05URE_7136729c-ab17-447c-9111-2cc04de4acae | SETTLED | Redeem | 11-16-2023 18:36:06 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPXXX | 2156 | EUR |
| | | REDEEM_PBSWALLET001_EURTRANSIT_20232011135023 | SETTLED | Redeem | 11-20-2023 13:51:26 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPPXXX | 50 | EUR |
| December | | REDEEM PRSWALLETOO1_EURTRANSIT_20232011140005 | SETTLED | Redeem | 11-20-2023 14:00:49 | 12-31-2022 | POS_WALLET | BDFEFR2TXXX | EUR_TRANSL. | CBCONSPRINK | 200 | EUR |
| Calalization of | | TRANSFER PRSWALLETO01 PRGWALLET001 20232011122632 | SETTLED | Transfer | 11-20-2023 12:27:41 | 12-31-2022 | POS_WALLET | BDFEFR2TXXX | PDG_WALLET | BDFEFR2TXXX | 100 | EUR |
| | | π | SETTLED | Transfer | 11-20-2023 12:33:41 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PDS_CLI1_W | PESOFROIDLT | 100 | EUR |
| | | redeem,pbgcli1wallet001,eurtransk,20232011140348 | SETTLED | Redeem | 11-20-2023 14:04:44 | 12-31-2022 | PBG_CLI1_W | PEGSGGIODLT | EUR_TRANSL | CBCONSPRINK | 50 | EUR |
| | | transfer pbs, pbb | SETTLED | Transfer | 11-15-2023 13:47:03 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PDB_WALLET | CBUXLUXDLT | 1200 | EUR |
| | | transfer-pbswallet001_pbgwallet001_20232011122026 | SETTLED | Transfer | 11-20-2023 12:21:11 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PDG_WALLET | BDFEFR2TXXX | 150 | EUR |
| | | transfer.pbg.pbb | SETTLED | Transfer | 11-15-2023 13:45:40 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBB_WALLET | CBLXLUXDLT | 13500 | EUR |
| | | transfer, pbg. pbs | SETTLED | Transfer | 11-15-2023 13:45:05 | 12-31-2022 | PBG_WALLET | BDFEFR2TXXX | PBS_WALLET | BDFEFR2TXXX | 15000 | DUR |
| | | transfer_pbs.pbg | SETTLED | Transfer | 11-15-2023 13:46:18 | 12-31-2022 | PBS_WALLET | BDFEFR2TXXX | PDG_WALLET | BDFEFR2TXXX | 45000 | EUR |
| | | tmasfer_pbgci1wallet001_pbswallet001_20232011134431 | SETTLED | Transfer | 11-20-2023 13:45:59 | 12-31-2022 | PBG_CLI1_W | PBGSGGIXIDLT | PBS_WALLET | BDFEFR2TXXX | 10 | EUR |
| | | | SETTLED | Transfer | 11-20-2023 13:42:25 | 12-31-2022 | PDG_WALLET | BDFEFR2TXXX | PDG_CLI1_W | PBGSGGXXDLT | 100 | EUR |

- Information available are:
- CBDC operation ID column corresponds to the ID of CBDC operations
- Status column corresponds to the current status of operation
- *Type* corresponds to the type of the operation (redeem, transfer or issuance)
- Accepted timestamps corresponds date and time when the operation has been correctly submitted
- Creation Date corresponds business date
- Debited Dedicated Cash Wallet corresponds to the name of the debited Dedicated Cash Wallet
- *Manager BIC debited DCW* corresponds to BIC of the manager of the debited Dedicated Cash Wallet
- Credited Dedicated Cash Wallet corresponds to the name of the credited Dedicated Cash Wallet
- Manager BIC Credited DCW correspond to the BIC of the credited Dedicated Cash Wallet
- Amount corresponds to the amount of the operation
- *Currency* corresponds to the currency of the operation
- By clicking on the ID instruction, one can have detailed information about the instruction:

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary strategy Economic Financial stability | Calendar date 11-20-2023 14:28:35 Singleuser @ BDF Dedicated Cash Wallet Owner Business date 12:31-2022 (2) (2) |
|---------------------------------|--|--|--|
| ⑦ Dashboard | CBDC operation > REDEEM_PBSWALLET001_EURTRANSIT_202320111350 | 23 | |
| Dedicated Cash Wallets | CBDC operation REDEEM_PBSWALLI | ET001_EURTRANSIT_20232011135023 | CANCEL |
| 🗂 T2 accounts | | | |
| GBDC Operations | Timeline | | Already Settled |
| n Global | Initialized | Accepted Settled | |
| n External network | 11-20-2023 13:51:23 | 11-20-2023 13:51:26 11-20-2023 13:51:47 | 100% |
| Reporting | BD 12-31-2022 | 12-31-2022 12-31-2022 | |
| Parameters | | | |
| | Details | | Amount |
| | CBDC transfer ID REDEEM_PBSWALLET001_EURTRANSIT_2023 2011135023 | Counterpart EUR_TRANSIT | Objective 50 € |
| | Type REDEEM | Amount 50 Currency FUR | Settled 50 C |
| | Status SETTLED | EUR | |
| | Dedicated Cash Wallet PBS_WALLET_001 | | |

- Timeline corresponds to the lifecycle of the instruction
- CB transfer ID corresponds to the ID of the operation
- Type corresponds to the type of the operation among redeem, transfer and issuance
- Status corresponds to the final status of the operation



- Dedicated Cash Wallet corresponds to the wallet of the participant involved in the operation
- Counterpart corresponds to the counterparty of the operation
- Amount corresponds to the amount of the operation
- Currency corresponds to the currency of the operation
- *Percentage* correspond to the percentage of the operation that is settled and below is the corresponding amount settled

4.7 Data extraction

The *reporting tab* allows **National CBDC Supervisor** and **DL3S Operator** to extract CBDC Operations (*CBDC operations extraction subtab*) and movement history (*Movement history extraction subtab*).

4.7.1 CBDC Operations extraction

National CBDC Supervisor can extract CBDC operations for any participant under its jurisdiction. **National CBDC Supervisor** with Dedicated Cash Wallet manager can extract CBDC operations for participant they manage event if he is not under its jurisdiction.

DL3S Operator can extract CBDC Operations for every participant of DL3S.

Reporting > CBDC operations extraction

CBDC operations extraction

| Type | Statuc | Pusiposs data | |
|--------------|----------------------|--------------------------|------|
| Туре | Status | Busiliess date | |
| All | ✓ All | ✓ 12/31/2022 - 12/31/202 | 22 🔳 |
| | | | |
| | | | |
| WALLETS | | | |
| WALLETS | | | |
| | | | |
| Participants | T2 account reference | Country code | |
| All | ~ All | ✓ All | |
| | | | |
| Wallet(s) | | | |
| | | | |
| | | | |

When doing an extraction, it is possible to filter on:

- Type, whether the CBDC operation is an issuance, a transfer, a redemption



CBDC operations extraction

| Гуре | | Status | | Business date |
|--|---|----------------------|---|-------------------------|
| All | ~ | All | ~ | 12/31/2022 - 12/31/2022 |
| AII TRANSFER ISSUANCE REDEEM WALLETS | | | | |
| Participants | | T2 account reference | | Country code |
| All | ~ | All | ~ | All |
| Wallet(s) | | | | |

- *Status,* whether the CBDC is in *accepted, settled, unsettled* status CBDC operations extraction

| Type | | Status | | Business date |
|--------------|---|----------------------|---|----------------------------------|
| All | • | All ACCEPTED | ~ | 12/31/2022 - 12/31/2022 E |
| WALLETS | | SETTLED UNSETTLED | | |
| Participants | | T2 account reference | | Country code |
| All | • | All | ~ | All |
| Wallet(s) | | | | |

- Business date of the operation



CBDC operations extraction

| OPTIONS | | |
|-----------------------------------|--|---|
| Type Status All • All • | Business date 12/31/2022 – 12/31/2022 | |
| WALLETS | DEC 2023 ▼ 〈 > | |
| Participants T2 account reference | S M T W T F S DEC 1 2 | |
| All Vallet(s) | 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | ~ |
| - | 17 18 19 20 21 22 23 24 25 26 27 28 29 30 | |
| CANCEL DATA EXTRACTION | 31 | |

- *Participants,* which participant to extract data from. CBDC operations extraction

| OPTIONS | | |
|---------|--------|---|
| Туре | Status | Business date |
| All | ✓ All | ✓ 12/31/2022 – 12/31/2022 ■ |

| WALLETS | | | | | |
|---|---|----------------------|---|--------------|---|
| Participants | | T2 account reference | | Country code | |
| All | ~ | All | ~ | All | ~ |
| All BDF NCBISSUER CBL PBB PBD PBE PBG PBR | | | | | |



- T2 Account Reference, a participant can extract data related to a specific T2 account reference

| OPTIONS | | | | |
|------------------------|---|---|---|--|
| Type All | ~ | Status All | ~ | Business date 12/31/2022 – 12/31/2022 💼 |
| WALLETS | | | | |
| Participants | ~ | T2 account reference | • | Country code |
| Wallet(s) | | All DXT2PBD001 FRT2GS001 FRT2PBG001 FRT2PBS001 NNT2PBR001 | | |
| CANCEL DATA EXTRACTION | | DXT2PB0001 FRT2GS001 FRT2PB6001 FRT2PB5001 NNT2PBR001 NNT2PBR002 | | |

CBDC operations extraction

- *Country code*. It is possible to filter on the country code of participants involved in CBDC Operations

CBDC operations extraction

| | | | | All |
|---------------------|------------|-------------------|---|----------------------|
| OPTIONS | | | | AT BE CS |
| Туре | St | atus | | DE DX EE |
| All | • | All | ~ | ES EU FI FR |
| WALLETS | | | | GR HR IE IT |
| Participants | T2 | account reference | | |
| All | ~ , | All | ~ | All |
| Wallet(s) | | | | |
| CANCEL DATA EXTRACT | ION | | | |

- Wallets. A participant can filter on wallets to extract CBDC Operations.



CBDC operations extraction

| OPTIONS | | | |
|-------------------------------------|---|----------------------|--|
| Type | • | Status All 🗸 | Business date 12/31/2022 – 12/31/2022 💼 |
| | | T2 account reference | Country code |
| PBS_CLI1_WALLET_(PBS_CLI2_WALLET_(| • | All | All |
| CANCEL DATA EXTRACTION | | | |

- Once the NCB chose its filters it clicks on "Data Extraction" and a CSV files is downloaded

| Tél | échargements | ð | Q | | ŵ |
|-----|------------------------------|-----------|--------|-----|---|
| ×a | extract_managed_ncb_supervis | ed_2023-1 | 11-20. | csv | |

- The file looks like this and the columns are the following:
 - o CBDC Operation ID
 - o CBDC Operation type
 - o Debited Dedicated Cash Wallet
 - Debited Dedicated Cash Wallet Owner BIC
 - o Debited Dedicated Cash Wallet Manager BIC
 - Debited Country Code
 - Debited T2/CLM account reference
 - o Credited Dedicated Cash Wallet
 - o Credited Dedicated Cash Wallet Owner BIC
 - Credited Dedicated Cash Wallet Manager BIC
 - Credited Country Code
 - Credited T2/CLM Account Reference
 - Settled Amount
 - o Currency
 - o Status
 - o Last Status- Business Date
 - Last Status Timestamp



| | A | В | С | D | E | F | G | н | 1 | J | К | L | м | N | 0 | Р | Q | R | S |
|----|-------------|---------------|---------------|-------------|-------------|-------------|-------------|-----------|-------------------|-------------|-------------|--------------|-----------|----------|----------------|---------------|---------------|---------------|-----|
| 1 | CBDC Opera | at CBDC Opera | 1 Debited CBD | Debited CBD | Debited CBD | Debited Cou | Debited T2/ | (Credited | d CBI Credited CB | Credited CB | Credited Co | Credited T2/ | Amount | Currency | Status (last s | Last status B | Last status T | imestamp | |
| 2 | issuance_P | B ISSUANCE | EUR_TRANSIT | F | CBCONSPPXX | X | | PBG_W/ | ALLET PBGSGGXXI | BDFEFR2TXX | FR | FRT2PBG001 | 150000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 (| 9:55:37 +0000 | UTC |
| 3 | issusance - | ISSUANCE | EUR_TRANSIT | 1 | CBCONSPPXX | X | | PBS_WA | ALLET PBSOFRXXE | BDFEFR2TXX | FR | FRT2PBS001 | 1000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 0 | 9:22:29 +0000 | UTC |
| 4 | ISSUANCE_ | P ISSUANCE | EUR_TRANSIT | r i | CBCONSPPXX | X | | PBS_WA | ALLET PBSOFRXXE | BDFEFR2TXX | FR | FRT2PBS001 | 234000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 (| 9:55:42 +0000 | JTC |
| 5 | issuance_El | J ISSUANCE | EUR_TRANSIT | ī . | CBCONSPPXX | x | | PBS_WA | ALLET PBSOFRXXE | BDFEFR2TXX | FR | FRT2PBS001 | 2000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 0:29:01 +0000 | UTC |
| 6 | redeem_pb | g REDEEM | PBG_CLI1_W | PBGSGGXXD | PBGSGGXXDI | FR | FRT2PBG001 | EUR_TR | ANSIT | CBCONSPPX | xx | | 50.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 3:05:06 +0000 | UTC |
| 7 | trnasfer_pb | gTRANSFER | PBG_CLI1_W | PBGSGGXXD | PBGSGGXXDI | FR | FRT2PBG001 | PBS_WA | ALLET PBSOFRXXE | BDFEFR2TXX | FR | FRT2PBS001 | 10.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 2:46:21 +0000 | JTC |
| 8 | transfer_pb | gTRANSFER | PBG_WALLET | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBB_WA | ALLET_001 | CBLXLLXXDL | r | | 13500.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 1 | 2:46:02 +0000 | UTC |
| 9 | transfer_pb | STRANSFER | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBG_W/ | ALLET PBGSGGXXI | BDFEFR2TXX | FR | FRT2PBG001 | 45000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 1 | 2:46:50 +0000 | UTC |
| 10 | transfer pb | TRANSFER | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBB_WA | ALLET_001 | CBLXLLXXDL | г | | 1200.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 1 | 2:47:24 +0000 | UTC |
| 11 | TRANSFER | PTRANSFER | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBG_W/ | ALLET PBGSGGXXI | BDFEFR2TXX | FR | FRT2PBG001 | 100.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 1:28:15 +0000 | UTC |
| 12 | REDEEM_PE | S REDEEM | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | EUR_TR | ANSIT | CBCONSPPX | xx | | 200.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 3:01:23 +0000 | JTC |
| 13 | REDEEM_PE | S REDEEM | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | EUR_TR/ | ANSIT | CBCONSPPX | xx | | 50.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 2:51:47 +0000 | UTC |
| 14 | BD_CLOSUR | EREDEEM | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | EUR_TR | ANSIT | CBCONSPPX | xx | | 2156.00 | EUR | SETTLED | 31/12/2022 | 2023-11-16 1 | 7:36:40 +0000 | UTC |
| 15 | tt | TRANSFER | PBG_WALLET | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBG_CLI | 1_W PBGSGGXX | PBGSGGXXD | FR | FRT2PBG001 | 100.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 2:42:47 +0000 | JTC |
| 16 | transfer_pb | gTRANSFER | PBG_WALLET | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBS_WA | ALLET PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | 15000.00 | EUR | SETTLED | 31/12/2022 | 2023-11-15 1 | 2:45:38 +0000 | UTC |
| 17 | BD_CLOSUR | E REDEEM | PBG_WALLET | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | EUR_TR | ANSIT | CBCONSPPX | xx | | 169908.00 | EUR | SETTLED | 31/12/2022 | 2023-11-16 1 | 7:36:37 +0000 | UTC |
| 18 | Π | TRANSFER | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBS_CLI | 1_W.PBSOFRXXD | PBSOFRXXD | FR | FRT2PBS001 | 100.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 1:34:02 +0000 | UTC |
| 19 | transfer-pb | s TRANSFER | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBG_W/ | ALLET PBGSGGXXI | BDFEFR2TXX | FR | FRT2PBG001 | 150.00 | EUR | SETTLED | 31/12/2022 | 2023-11-20 1 | 1:21:45 +0000 | UTC |
| | | | | | | | | | | | | | | | | | | | |

4.7.2 Movement history extraction

National CBDC Supervisor can extract movement history for any participant under its jurisdiction. **National CBDC Supervisor** with Dedicated Cash Wallet manager can extract movement history for participant they manage event if he is not under its jurisdiction.

DL3S Operator can extract movement history for every participant of DL3S.

Movement history extraction

| OPTIONS | | | |
|------------------------|---|---|--------------|
| Type All | • | Settlement business date 12/31/2022 – 12/31/2022 💼 | |
| WALLETS | | | |
| Participants | | T2 account reference | Country code |
| All | ~ | All | All |
| Wallet(s) | | | |
| CANCEL DATA EXTRACTION | | | |

When doing an extraction, it is possible to filter on:

- Type, whether the movement is an issuance, a transfer, a redemption or a DvP



Movement history extraction

| OPTIONS | |
|--|--|
| Туре | Settlement business date |
| All | ✓ 12/31/2022 - 12/31/2022 |
| All TRANSFER ISSUANCE REDEEM DVP | |
| Participants | T2 account reference Country code |
| All | All All |
| Wallet(s) | |
| • | |
| CANCEL DATA EXTRACTION | |

- Business date of movements

Movement history extraction

| OPTIONS | |
|------------------------|---|
| Type All 🗸 | Settlement business date 12/31/2022 – 12/31/2022 💼 |
| WALLETS | DEC 2023 - < > |
| Participants | DEC 1 2 Country code |
| Wallet(s) | 10 11 12 13 14 15 16 17 18 19 20 21 22 23 |
| CANCEL DATA EXTRACTION | 24 25 26 27 28 29 30 31 |

- *Participants,* which participant to extract movements from.



Movement history extraction

| OPTIONS | | |
|---------|---|--------------------------|
| Туре | | Settlement business date |
| All | ~ | 12/31/2022 - 12/31/2022 |

| WALLETS | | | |
|--------------------------|----------------------|------------------|---|
| Participants | T2 account reference | Country code | |
| All BDF NCBISSUER | - All | All | • |
| CBL PBB PBD PBE | | | |
| PBG PBR PBS | | | |

- T2 Account Reference, a participant can extract movements related to a specific T2 account reference

Reporting > Movement history extraction

Movement history extraction

| OPTIONS | | | | | |
|------------------|---|--|---|--------------|---|
| Type All | ~ | Settlement business date 12/31/2022 – 12/31/2022 | | | |
| WALLETS | | | | | |
| Participants | | T2 account reference | | Country code | |
| All Wallet(s) | | All All DXT2PBD001 FRT2PB0001 FRT2PB001 FRT2PB001 DXT2PB001 DXT2PB001 FRT2PB001 FRT2PB001 FRT2PB001 NNT2PBR001 NNT2PBR001 NNT2PBR002 | v | All | ~ |

- Country code. It is possible to filter on the country code of participants involved in movements



Movement history extraction

| | | AT |
|------------------------|---|--|
| OPTIONS | | BE CS CY |
| Type All | Settlement business date ✓ 12/31/2022 – 12/31/2022 ■ | DE DX EE ES EU FI FR |
| WALLETS | | GR HR IE IT LL LT |
| Participants | T2 account reference | LU LV |
| All | ✓ All ✓ | All |
| Wallet(s) | | |
| CANCEL DATA EXTRACTION | | |

- Wallets. A participant can filter on wallets for extracting movements.

Movement history extraction

| OPTIONS | |
|---|---|
| Type | Settlement business date ✓ 12/31/2022 |
| | |
| PBS_CLI1_WALLET_I PBS_CLI1_WALLET_I PBS_CLI2_WALLET_I | All All |
| CANCEL DATA EXTRACTION | |

- Once the NCB chose its filters it clicks on "Data Extraction" and a CSV files is downloaded



- The file looks like this and the columns are the following:
 - o Instruction ID
 - Movement type
 - Operation type
 - Dedicated Cash Wallet



- o Dedicated Cash Wallet Owner BIC
- o Dedicated Cash Wallet Manager BIC
- o Country Code
- Debited T2/CLM account reference
- o Counterpart Dedicated Cash Wallet
- Counterpart Dedicated Cash Wallet Owner BIC
- o Counterpart Dedicated Cash Wallet Manager BIC
- Settled Amount
- Currency
- Status
- Settlement timestamps

| A A | В | С | D | E | F | G | н | 1 | J | K | L | M | N | 0 | P | |
|----------------------------|---------------|------------------------------------|---------------------|------------|---------------|------------|---------------|-------------|------------------|-------------|-------------|----------|---------|------------|--------------|--------|
| Instruction ID | Movement Type | Operation type | CBDC Wallet | CBDC Walle | t CBDC Wallet | Country Co | d T2/CLM acco | Counterpart | Counterpart | Counterpart | Settled amo | Currency | Status | Settlemen | t Timestamp | |
| trnasfer_pbgcli1wallet001_ | pt Debit | TRANSFER | PBG_CLI1_WALLET_001 | PBGSGGXXD | PBGSGGXXD | FR | FRT2PBG001 | PBS_WALLET | PBSOFRXXD | BDFEFR2TX) | 10.00 | EUR | SETTLED | 2023-11-20 | 12:46:28 +00 | 00 UTC |
| tt | Credit | TRANSFER | PBG_CLI1_WALLET_001 | PBGSGGXXD | PBGSGGXXD | IFR | FRT2PBG001 | PBG_WALLE | PBGSGGXXD | BDFEFR2TXX | 100.00 | EUR | SETTLED | 2023-11-20 | 12:42:47 +00 | 00 UTC |
| redeem_pbgcli1wallet001_ | eu Debit | REDEEM | PBG_CLI1_WALLET_001 | PBGSGGXXD | PBGSGGXXD | FR | FRT2PBG001 | EUR_TRANS | IT | CBCONSPPX | 50.00 | EUR | SETTLED | 2023-11-20 | 13:05:08 +00 | 00 UTC |
| π | Credit | TRANSFER | PBS_CLI1_WALLET_005 | PBSOFRXXD | I PBSOFRXXDI | FR | FRT2PBS001 | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | 100.00 | EUR | SETTLED | 2023-11-20 | 11:34:02 +00 | 00 UTC |
| transfer_pbg_pbb | Debit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBB_WALLE | T_001 | CBLXLLXXDL | 113500.00 | EUR | SETTLED | 2023-11-15 | 12:46:02 +00 | 00 UTC |
| transfer_pbb_pbg | Credit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBB_WALLE | T_001 | CBLXLLXXDL | 13408.00 | EUR | SETTLED | 2023-11-15 | 12:44:12 +00 | 00 UTC |
| transfer_pbs_pbg | Credit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBS_WALLE | PBSOFRXXD | BDFEFR2TXX | 45000.00 | EUR | SETTLED | 2023-11-15 | 12:46:39 +00 | 00 UTC |
| TRANSFER_PBSWALLET001 | PECredit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | 100.00 | EUR | SETTLED | 2023-11-20 | 11:28:03 +00 | 00 UTC |
| issuance_PBG | Credit | ISSUANCE | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | EUR_TRANS | т | CBCONSPPX | 150000.00 | EUR | SETTLED | 2023-11-15 | 09:55:48 +00 | 00 UTC |
| tt | Debit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBG_CLI1_W | PBGSGGXXD | PBGSGGXXD | 100.00 | EUR | SETTLED | 2023-11-20 | 12:42:47 +00 | 00 UTC |
| transfer_pbg_pbs | Debit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBS_WALLET | PBSOFRXXD | BDFEFR2TXX | 15000.00 | EUR | SETTLED | 2023-11-15 | 12:45:27 +00 | 00 UTC |
| transfer-pbswallet001_pbg | wa Credit | TRANSFER | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | PBS_WALLET | PBSOFRXXD | BDFEFR2TX> | 150.00 | EUR | SETTLED | 2023-11-20 | 11:21:33 +00 | 00 UTC |
| BD_CLOSURE_3572720a-19 | 8a Debit | REDEEM | PBG_WALLET_001 | PBGSGGXXD | BDFEFR2TXX | FR | FRT2PBG001 | EUR_TRANS | IT | CBCONSPPX | 169908.00 | EUR | SETTLED | 2023-11-16 | 17:36:25 +00 | 00 UT |
| transfer_pbs_pbg | Debit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBG_WALLE | PBGSGGXXD | BDFEFR2TX> | 45000.00 | EUR | SETTLED | 2023-11-15 | 12:46:39 +00 | 00 UT |
| transfer pbs_pbb | Debit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | PBB_WALLE | T_001 | CBLXLLXXDL | 11200.00 | EUR | SETTLED | 2023-11-15 | 12:47:24 +00 | 00 UT |
| TRANSFER_PBSWALLET001 | _PE Debit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | PBG_WALLE | PBGSGGXXD | BDFEFR2TX) | 100.00 | EUR | SETTLED | 2023-11-20 | 11:28:03 +00 | 00 UT(|
| trnasfer_pbgcli1wallet001 | pb Credit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | PBG_CLI1_W | PBGSGGXXD | PBGSGGXXD | 10.00 | EUR | SETTLED | 2023-11-20 | 12:46:28 +00 | 00 UT |
| issusance -pbs2 | Credit | ISSUANCE | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 1000.00 | EUR | SETTLED | 2023-11-20 | 09:22:41 +00 | 00 UT |
| transfer_pbb_pbs | Credit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | PBB_WALLE | T_001 | CBLXLLXXDL | 14356.00 | EUR | SETTLED | 2023-11-15 | 12:44:39 +00 | 00 UT |
| ISSUANCE_PBS | Credit | ISSUANCE | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 234000.00 | EUR | SETTLED | 2023-11-15 | 09:55:48 +00 | 00 UT |
| transfer_pbg_pbs | Credit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | PBG_WALLE | PBGSGGXXD | BDFEFR2TXX | 15000.00 | EUR | SETTLED | 2023-11-15 | 12:45:27 +00 | 00 UT |
| π | Debit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | PBS_CLI1_W | PBSOFRXXD | PBSOFRXXD | ι 100.00 | EUR | SETTLED | 2023-11-20 | 11:34:02 +00 | 00 UT |
| transfer-pbswallet001_pbg | waDebit | TRANSFER | PBS_WALLET_001 | PBSOFRXXD | LBDFEFR2TXX | FR | FRT2PBS001 | PBG_WALLE | PBGSGGXXD | BDFEFR2TXX | 150.00 | EUR | SETTLED | 2023-11-20 | 11:21:33 +00 | 00 UT |
| issuance_EURTRANSIT_PBS | W, Credit | ISSUANCE | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 2000.00 | EUR | SETTLED | 2023-11-20 | 10:29:11 +00 | 00 UT |
| REDEEM_PBSWALLET001_E | UR Debit | REDEEM | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 200.00 | EUR | SETTLED | 2023-11-20 | 13:01:13 +00 | 00 UT |
| REDEEM_PBSWALLET001_E | UR Debit | REDEEM | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 50.00 | EUR | SETTLED | 2023-11-20 | 12:51:50 +00 | 00 UT |
| BD_CLOSURE_7136729c-ab: | 17 Debit | REDEEM | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | EUR_TRANS | т | CBCONSPPX | 2156.00 | EUR | SETTLED | 2023-11-16 | 17:36:37 +00 | 00 UT |
| Trade-htlc-pbs-pbb-secret | 15 Debit | DVP | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | | | | -5000.00 | EUR | SETTLED | 2023-11-15 | 11:09:28 +00 | 00 UT |
| Trade-htlc-pbs-pbb-secret | 16 Debit | DVP | PBS_WALLET_001 | PBSOFRXXD | L BDFEFR2TXX | FR | FRT2PBS001 | | | | -50000.00 | EUR | SETTLED | 2023-11-16 | 15:30:30 +00 | 00 UT |
| Trade-htlc-pbs-pbb-secret | 16 Debit | DVP | PBS_WALLET_001 | PBSOFRXXD | LBDFEFR2TXX | FR | FRT2PBS001 | | | | -50000.00 | EUR | SETTLED | 2023-11-16 | 15:32:32 +00 | 00 UT |
| Trade-htlc-pbs-pbb1511_R | ECE Debit | DVP | PBS_WALLET_001 | PBSOFRXXD | BDFEFR2TXX | FR | FRT2PBS001 | | | | -100000.00 | EUR | SETTLED | 2023-11-15 | 11:02:46 +00 | 00 UT |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

4.8 Blocking and unblocking of participant

4.8.1 Blocked and unblocked statuses

Participants with the role of **DCW owner** or **DCW user** (commonly payment bank and their clients) have a blocking status which can be blocked or unblocked. It is to be noted, that National CBDC Supervisor and CBDC Issuer do not have this status as they cannot be blocked. The blocking status of a participant is accessible in the global tab

4.8.1.1 Participant status

By clicking on the *participant list* subtab in the *global tab*, one can access to the blocking status of participant with **DCW Owner** role. It is accessible to every participant on DL3S.



| Participants | | | | | | | Inactive |
|--------------|--------|---------------|--------------|---|--------------|----------|------------------|
| ‡ Entity ID | ‡ Type | \$ Short Name | Country Code | Rales | Valid From | Valid To | #Blocking Status |
| BDFEFR2TXXX | BIC | DDF | FR | Dedicated Cash Walter Owner Dedicated Cash Walter Manager CBDC Issuer National CBDC Supervisor | 01-01-2022 🖍 | 1 | |
| CBDEDXXXDLT | BIC | CBD | DX | National CBDC Supervisor | 01-01-2022 🧪 | 1 | |
| CBLXLLXXDLT | BIC | CBL | ш | Dedicated Cash Walter Owner Dedicated Cash Walter Manager CDDC Issuer National CBDC Supervisor | 01-01-2022 🖍 | 1 | |
| CCBCNSPPXXX | BIC | NCBISSUER | G | Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer CBDC Supervisor | 01-01-2022 🖍 | 1 | |
| 0 | BIC | ESSAI | FR | CBDC Issuer Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager Dedicated Cash Wallet Custodian CBDC Supervisor National CBDC Supervisor | 01-18-2024 🖍 | 1 | |
| OPEREUFFXXX | BIC | DL3S OPERATOR | | DL3S Operator | 01-01-2022 🧪 | 1 | |
| PBBILLXXDLT | BIC | P08 | ц | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | 01-01-2022 🧪 | 1 | ۵ |
| PBDEDXXXDLT | BIC | PBD | DX | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | 01-01-2022 🧪 | 1 | 8 |
| PBEILLXXDLT | BIC | PBE | ш | Dedicated Cash Wallet Owner | 01-01-2022 🖌 | 1 | ÷ |
| PBGSGGXXDLT | BIC | PBG | FR | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | 01-01-2022 🧪 | 1 | ê |
| PBRBNNXXDLT | BIC | PBR | NN | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | 01-01-2022 🖍 | 1 | â |
| PBSOFRXXDLT | BIC | POS | FR | Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian | 01-01-2022 🧪 | 1 | â |

By clicking on the *client list* subtab in the *global tab*, one can access to the blocking status of participant with **DCW User** role. It is only accessible to **DL3S Operator** and **DCW Custodian**. DL3S Operator will be able to see all **DCW User** on DL3S whereas **DCW Custodian** will have the visibility only on its clients.

| Clients | | | | | | | Inactive |
|---------------------------|---------|---------------|--------------|----------------------------|--------------|----------|-----------------|
| ‡ Entity ID | \$ Type | \$ Short Name | Country Code | Rales | Valid From | Valid To | Slocking Status |
| 00CLI1PBBINVESTOR0000001 | LD | PBB-CLI1 | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | ê |
| 00CLI2PBBINVESTOR0000002 | LD | PBB-CL12 | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | 8 |
| 00CLI1 PBDINVESTOR0000001 | LD | PBD-CLI1 | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | 8 |
| 00CLI2PBDINVESTOR0000002 | LEI | PBD-CLI2 | | Dedicated Cash Wallet User | 01-01-2022 🖍 | 1 | e |
| 00CL11 PBRINVESTOR0000001 | LEI | PBR-CLI1 | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | ê |
| 00CLI2PBRINVESTOR0000002 | LD | PBR-CL12 | | Dedicated Cash Wallet User | 01-01-2022 🖌 | 1 | ê |
| 00CL11PBGINVESTOR00000001 | LD . | PBG-CLH | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | ۵ |
| 00CLI2PDGINVESTOR00000002 | LD . | PBG-CLI2 | | Dedicated Cash Wallet User | 01-01-2022 🧪 | 1 | ê |
| 00CL/11PBSINVESTOR000001 | LD | PBS-CLI1 | | Dedicated Cash Wallet User | 01-01-2022 🖍 | 1 | ê |
| 00CLI2PBSINVESTOR000002 | LD | PB5-CLI2 | | Dedicated Cash Wallet User | 01-01-2022 🖍 | 1 | e |

The blocking status appears in the column "Blocking Status" and is represented by a padlock.

- If the padlock blue, you are allow to act on the participant status, meaning you can either block or unblock the participant
- If the padlock is grey, you are not allowed to act on the participant status.
- If the padlock is closed, the participant is blocked
- If the padlock is open, the participant is unblocked

4.8.1.2 **DCW** status

Dedicated Cash Wallets of participant also have a blocking status. The blocking status of a wallet can be blocked or unblocked and reflect the participant blocking status. If DCW owner is blocked, its DCW owned will be blocked. In the *Dedicated Cash Wallets* tab, a column "blocking status" displays the corresponding DCW status.



Dedicated Cash Wallets - managed

| | | | | Guidard | | | | | | | |
|---|----------------------|-----------------|-------------|------------------|----------|-----------|--------------|---------------|--------------|--------------|-----------------|
| Wallet ID | T2 Account Reference | Wallet Alian | Owner BIC | Owner Short Name | Currency | Available | Country Code | Token Details | Valid From | Valid To | Slocking status |
| hfLyv9iqyh3ceaCVX343LtEFdrs5Yy6mQ4sE1Q02onig= | FRT2PBD001 | PBD_WALLET | PBDEDXXXDLT | PBD | EUR | 0 | DX | See Details | 01-16-2024 🖌 | 1 | Blocked |
| jRN2pACWolGZbdqwp5dhBe45gjF2iCR57qj3kMZ3YJs= | FRT2PBG001 | PBG_WALLET | PBGSGGXXDLT | PBG | EUR | 0 | FR | See Details | 01-16-2024 🖌 | 1 | |
| x+cn/fdkVoqmEQdio9RsIFX0FuCVUgdbaOEwcL7T8GI- | FRT2PBG001 | PBG_WALLET4 | PBGSGGXXDLT | PBG | EUR | 0 | FR | See Details | 02-02-2024 🖌 | 02-15-2024 🖌 | |
| ZIX5G87D8s/tOIOtLWKp8JEsBnQmouhPghoExWZr7JQ- | FRT2PBG001 | PBG_WALLETS | PBGSGGXXDLT | PBG | EUR | 0 | FR | See Details | 02-03-2024 🖌 | 1 | |
| dn5EhaDjCjmlS4VJ1uc+8w6dfYg3I4/2i1Q/torSM3M- | FRT2PBR001 | PBR_WALLET | PBRBNNXXDLT | PBR | EUR | 0 | NN | See Details | 01-16-2024 🖌 | 05-07-2024 🖌 | |
| J3sMOgBfAgv9q/6wxaLcaP35O5H27v91wTzz+tYj2h0- | FRT2PBS001 | PBS_WALLET | PBSOFRXXDLT | PBS | EUR | 4900 | FR | See Details | 01-16-2024 🖌 | 02-13-2024 🖌 | |
| HT3TjT8z9ZiG6/gmMh+RoGpJ7AKhuLZguUNaeYSDenQ~ | FRT2PBS001 | PBS_WALLET2 | PBSOFRXXDLT | PBS | EUR | 0 | FR | See Details | 01-18-2024 🖌 | 02-21-2024 🖌 | |
| III633j27xbK7eLJIebMDI2PrHnqftpKmxuannin1DU- | FRT2PBS001 | TEST_WALLET_PBS | PBSOFRXXDLT | PBS | EUR | 0 | FR | See Details | 02-05-2024 🖌 | 02-09-2024 🖌 | |

Create a Dedicated Cash wallet Inactive

If the DCW is blocked, the column will displays "blocked". If the DCW is not blocked, the column will stay empty. When a *DCW owner* is blocked, all his owned DCW are automatically blocked including DCW used by its clients.

4.8.2 Blocking of a participant

4.8.2.1 Blocking capability

Participants allowed to block are:

- DL3S Operator
- DCW Manager
- DCW Custodian

DL3S Operator can block every participants with DCW owner or DCW User role.

DCW Manger can block participant with **DCW Owner** role for which he manages a DCW.

DCW Custodian can block participant with DCW User role that use one of its DCW.

4.8.2.2 Participant blocking

To block a participant, one need to access the *participant list* or the *client list* subtab in the *global tab* depending on the type of participant that has to be blocked. One need to click on the padlock in the "blocking status" column. The padlock has to be blue and open for the blocking to be accessible (as the padlock on the second line in the example below).



When clicking on the padlock, a confirmation message appears to confirm the blocking. It is possible to confirm or to cancel the blocking. The blocking happens immediately after the confirmation of this message.



| his action will have the following consequences: All existing and newly created dedicated cash wallet owned or used by the participants will be automatically blocked. All new transactions and recyclable transactions will be ineligible for settlement. | Proceed to bl | ek the client PBS-CLI2 | (00CLI2PBSINVESTOR000002) |
|--|--|---|---|
| All existing and newly created dedicated cash wallet owned or used by the participants will be automatically blocked. All new transactions and recyclable transactions will be ineligible for settlement. | This action wi | I have the following co | insequences: |
| | All existi or used I All new t will be in | g and newly created de y the participants will be ansactions and recyclat eligible for settlement. | dicated cash wallet owned e automatically blocked. ole transactions |

After the confirmation, the participant status is "blocked" and its owned DCW are "blocked".

4.8.2.2.1 DCW management of a blocked participant

DCW of a blocked participant are automatically blocked. It is possible to create a new DCW for a blocked participant but this one will have the "blocked" status. A warning message will appear when creating a DCW for a blocked participant.

| ew Dedicate | d Cash | Wallet | | | | | | | | | |
|----------------------|-------------------|------------------|----------------------|---------------------|---------------|-------------|--------------|---------------|--------------|--------------------|-----------------|
| PERIMETER | | | | | | | | 2/7/2024 | ē | Valid To | Ē |
| | | | | | | | | | | | |
| Dedicated Cash Wa | llet Type * | Dedicated Cash | Wallet Alias * | | Client Name * | | | Currency * | | | |
| ● Standard ○ | Issuance | PBD_WALLET2 | | | PBD | | | Euro | | ~ | |
| | | | | | | | | | | | |
| T2 Account reference | ce * | | | | | | | | | | |
| FRT2PBD001 | | ~ | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Given the participa | int status, th | e dedicated cash | wallet will be block | ed. | | | | | | | |
| | | | | | | | | | | | |
| edicated Cash | Wallets - | managed | | | | | | | Create a | Dedicated Cash wal | let Inactive |
| | | 0 | | | | | | | | | |
| | | | | | Standa | rd Issuance | | | | | |
| | | | | | | | | | | | |
| ¢ T2/ Ref | Account erence | Wallet Alias | + Owner BIC | Owner Short Name | + Currency | | Country Code | Token Details | Valid From | Valid To | Blocking status |
| sE1Q02onig= FRT | 2PBD001 | PBD_WALLET | PBDEDXXXDLT | PBD | EUR | 0 | DX | See Details | 01-16-2024 🧪 | 1 | Blocked |
| 55nnZhsF84do= FRT | 2PBD001 | PBD_WALLET2 | PBDEDXXXDLT | PBD | EUR | 0 | DX | See Details | 02-07-2024 🖍 | / | Blocked |

The newly created DCW will appear with the blocked status after its creation.

4.8.2.2.2 Operations involving a blocked participant

A transaction involving a blocked participant will be ineligible for settlement. When submitting a request for an operation involving a blocked participant, a warning message will appear to inform that the operation will be ineligible for settlement.

| BANQUE DE FRANCE |
|------------------|
| EUROSYSTÈME |

<u>CBDC operation</u> > New CBDC operation

| PARTIES | | | |
|----------------------------------|--|--------------------------|-------------------------|
| CBDC Operation ID * | Type * | Instructing party name * | Instructing party BIC * |
| transfer_PBD_blocked | | BDF | BDFEFR2TXXX |
| Futoroal activary t | | | |
| Yes () No | | | |
| | | | |
| DEDICATED CASH WALLETS | | | |
| Debited Dedicated Cash Wallet * | Debited Dedicated Cash Wallet Manager BIC * | | |
| PBD_WALLET | BDFEFR2TXXX | | |
| Credited Dedicated Cash Wallet * | Credited Dedicated Cash Wallet Manager BIC * | | |
| PBS_WALLET | BDFEFR2TXXX | | |
| | | | |
| TRANSFER | | | |
| Amount * Current | y* | | |
| 5 Euro | ~ | | |
| | | | |
| eviced Field | | | |
| quired Field | | | |

After submission of the request, the operation is unsettled.

| CBDC Operations - managed | | | | | | | | Create a C | BDC Operation | | |
|---------------------------|----------------------|-------------|-----------|------------------------|---------------|-------------------------------------|----------------------------|--------------------------------------|-----------------------------|-------------|---------------|
| Type - | | | | | | | | | | | |
| | CBDC Operation ID | ≑ Status | ¢ ⊺ype | Accepted Timestamp | Creation Date | Debited Dedicated Cash Wallet | Manager BIC debited DCW | Credited Dedicated Cash Wallet | Manager BIC Credited DCW | ◆ Amount | ¢ Currency |
| | transfer_PBD_blocked | UNSETTLED | Transfer | 02-06-2024 14:44:06 | 02-07-2024 | PBD_WALLET | BDFEFR2TXXX | PBS_WALLET | BDFEFR2TXXX | 5 | EUR |

4.8.3 Unblocking of a participant

4.8.3.1 Unblocking capability

Participants allowed to unblock are the same one as the one allowed to block, e.g.:

- DL3S Operator
- DCW Manager
- DCW Custodian

DL3S Operator can unblock every participants with **DCW owner** or **DCW User** role.

DCW Manger can unblock participant with DCW Owner role for which he manages a DCW.

DCW Custodian can unblock participant with DCW User role that use one of its DCW.

The participant unblocking does not have to be the one who blocked the participant initially.



Participant unblocking

To unblock a participant, one need to access the *participant list* or the *client list* subtab in the *global tab* depending on the type of participant that has to be unblocked. One need to click on the padlock in the "blocking status" column. The padlock has to be blue and closed for the unblocking to be accessible (as the padlock on the first line in the example below).

| ¢ | Blocking Status | |
|---|-----------------|--|
| | â | |
| | ۵ | |

When clicking on the padlock, a confirmation message appears to confirm the unblocking. It is possible to confirm or to cancel the unblocking. The unblocking happens immediately after the confirmation of this message.

Blocking client

Proceed to unblock the client PBS-CLI1 (00CLI1PBSINVESTOR000001)?

This action will have the following consequences:

- All existing and newly created dedicated cash wallet owned or used by the participants will be automatically unblocked.
- All new transactions and recyclable transactions will be eligible for settlement.



After the confirmation, the participant status is "unblocked" and its owned DCW are "unblocked".

5 DL3S Operator Screens

5.1 End of Day processes

The **DL3S Operator** can do three actions in *Parameters tab* that other roles cannot do:

- Cash Sweep, also called CBDC full redemption
- Updating the business window time slots
- Updating the Business Date

| EUR | OSYSTÈME | | | | | | | |
|-----|---|------|--|---------------------------------------|--|----------------------|---|--|
| | BANQUE DE FRANCE EUROSYSTÈME | DL3S | | | Monetary strategy Financial stability | Economic services | Calendar date 03-06-2024 12:00:50 Business date 12-31-2022 Business window Open for All | singleuser @ Operator DL3S Operator 🖉 |
| | Dashboard Dedicated Cash Wallets | | Parameters Parameters | | | | | |
| | f T2 accounts CBDC Operations f Global | | Business Day Business Window Time Lock | 12-31-2022 🖍 Open for All 🖍 240 | | | | |
| | £xternal network Reporting 4 eyes process | | | | | CBDC full redemption | | |
| | Parameters | | | | | | | |

5.1.1 CBDC Full Redemption

BANQUE DE FRANCE

CBDC full redemption is a daily operation monitored by the DL3S Operator only and by default.

This action is enabled only during the End of Day window, meaning that the button isn't clickable during other business windows.

If the current business window is "End of Day", when the **DL3S Operator** clicks on *CBDC full redemption*, every Dedicated Cash Wallets go back to 0 balance and EUR_TRANSIT wallet is credited back of the total amount of CBDC it previously issued. EUR_TRANSIT Dedicated Cash Wallet balance that was previously negative should go back to 0 balance.

5.1.2 Updating the Business Date

The **DL3S Operator** can also change the DL3S *business date* by clicking on the little pen next to *Business Day*.

Once again and similarly to the CBDC full redemption, this action is enabled on the DL3S GUI only during the End of Day window.

After choosing the required date that can only be in the future, it must click on the little save picture to validate the new date.



| | BANQUE DE FRANCE Eurosystème | DL3S | Monetary strategy Financial stability | Calendar date 03-06-2024 14:51:12 Business date 12-31-2022 Business window End of Day | singleuser @ Operator DL3S Operator & |
|---|---------------------------------|-------------------|--|---|--|
| Ø | Dashboard | Parameters | | | |
| G | Dedicated Cash Wallets | Parameters | | | |
| G | T2 accounts | Business Day 1 | 2-31-2022 🖍 | | |
| 6 | CBDC Operations | Business Window E | nd of Day 🎤 | | |
| ñ | Global | Time Lock 2 | 10 | | |
| ñ | External network | | CRDC full redenation | | |
| Ø | Reporting | | CBDC full redemption | | |
| đ | 4 eyes process | | | | |
| Ø | Parameters | | | | |

5.2 Business Window time slots setup

Any time in the day, DL3S operators are able to setup and update the different time slots defining the business windows under DL3S platform.

When clicking on the pen on the right of the current window shown on the DL3S Operator Parameters' screen (see screenshot above), the DL3S operator will land on the screen below:

| BANQUE DE FRANCE EUROSYSTÈME | DL3S | Monetary Excerpting Financial Establishy | Calendar date 03-06-2024 14:52:50 Business date 12-31-2022 Business window End of Day | singleuser @ Operator DL3S Operator $\stackrel{O}{\sim}_{x}$ |
|---------------------------------|----------------------|---|---|---|
| 🕐 Dashboard | Parameters | | | |
| Dedicated Cash Wallets | Business Windows | | | |
| T2 accounts | Start of Day 09:00 ↓ | | | |
| CBDC Operations | End of Day 14:00 | | | |
| ក្នំ Global | ↓ Closed 15:30 | | | |
| ាំ External network | CANCEL SUBMIT | | | |
| 🕐 Reporting | | | | |
| 4 eyes process | | | | |
| Parameters | | | | |

The time slots are defined as above by default on DL3S platform. Nevertheless, the DL3S Operators can change them anytime. This will be taken automatically into account and be updated instantaneously.



5.3 Whitelisting

See the Network List and the external network whitelist part (3.3).

5.4 Data Extraction

The **DL3S Operator** can extract CBDC Operation and movement history for every participant on DL3S.

See Data extraction section previously described (4.7).

6 Annexes

6.1 Annexe 1: NCBs levels of participation

There are 3 levels of participation for a National Central Bank:

Level 1 - NCB not participating to DL3S: The NCB is not present in DL3S but is responsible
of the relationship with commercial banks under its jurisdiction that wish to participate
to DL3S. Commercial banks' Dedicated Cash Wallets are thus managed by a different
NCB, which is going to be BdF which participates to DL3S and has in particular the role
of Dedicated Cash Wallet manager.

In this case, a Level 1- NCB has no role and no type of participation in DL3S.

- Level 2 NCB participating to DL3S with an observer role: The NCB is responsible of the commercial banks under its jurisdiction and has a read-only access to information related to Dedicated Cash Wallets, operations as well as the total outstanding amount within the same country (same jurisdiction). Commercial banks' Dedicated Cash Wallets are managed by a different NCB, which is going to be BdF which participates to DL3S and has in particular the role of *Dedicated Cash Wallet manager*.
 In this case, a Level2-NCB will only have the role of *National Supervisor* and could be either a *Blockchain participant* or a *Direct participant*
- <u>Level 3 NCB participating to DL3S with an active role:</u> The NCB handles the creation of Dedicated Cash Wallets for commercial banks, has visibility on information related to Dedicated Cash Wallets, CBDC operations and the total amount outstanding in the same country.

The NCB is also able to:

- Initiate CBDC operations for owned and managed Dedicated Cash Wallets (issuance, transfers and redemption operations).
- Store and manage crypto materials for owned and managed Dedicated Cash Wallets
- In DvP with Hash Time Lock Contract ("HTLC") process:
 - Locks funds, audits cash lock and claims the CBDC for its managed Dedicated Cash Wallets.
 - Operates HTLC connector for the Dedicated Cash Wallets managed.

In this case, a Level 3-NCB has the roles of **CBDC Issuer**, **National CBDC Supervisor**, **Dedicated Cash Wallet Owner**, **Dedicated Cash Wallet Manager** and must be a Blockchain participant.





7.2. Onboarding procedures

7.2.1.DL3S DLT onboarding (Test Phase 1B)

Document available for Eligible Market DLT Operator and Eligible Market Participant.



7.2.2. Liquidity management process

Date: March 2024 Version: v1.5

This document depicts the steps to undertake in order to onboard participants on DL3S in a view to use the Full DLT solution Interoperability for the exploratory work and the liquidity management process that will apply in order to support the DL3S settlement day.

The participants on DL3S (Cash DLT participants) can be:

- National Central Banks (NCB)
- Payment Banks on DLT (PBD)
- Clients of Payment Banks on DLT (Clients of PBD).

The below procedures assume that the DL3S DLT participants meet the Eurosystem eligibility criteria for the exploratory work.

This operational set-up for liquidity management only applies to NCBs and PBs involved in trials (i.e. transactions in real) of the Eurosystem exploratory work.

Operational set up for liquidity management in the RTGS and in DL3S

1. General considerations / Definitions

This liquidity management procedure only apply to trials (i.e. involving transactions in real) of the Eurosystem exploratory work. There are two type of actors requesting a liquidity management's set up in the BdF *Full-DLT Interoperability* solution:

- Nationals Central Banks (NCBs) that would operational support in TARGET Services for their participants during exploratory work, this includes the setting up and operation of NCB RTGS accounts for an escrow mechanism.
- PBD are any entity with access to T2/RTGS (i.e. being a "RTGS participant"), within the meaning of Articles 4 and Articles 7, Annex 1 Part I of the TARGET Guideline, and participating in exploratory work in that capacity.

Market DLT platforms are not involved in liquidity management procedure.

2. National Central Bank

Each NCB sets up escrow accounts to support their own market participants interested in participating to trials with the *Full DLT Interoperability* solution. Participants fund those accounts at the beginning of the trial intraday process and the NCBs defund them at the end. These NCB accounts could be created specifically for exploratory work or could be existing accounts. They can be RTGS CB Accounts or RTGS DCAs. The management of these accounts would be under the sole responsibility of the individual NCBs involved.

The funding is made with full transfer of ownership. Funds held in the NCB escrow account belong therefore to the NCB, not to Payment Banks. As they do not remain on these accounts overnight,



funds held in escrow accounts would bear no interest and would not be counted for compliance with minimum reserves requirements. Exploratory liquidity is minted at the start of the trial day on a 1:1 basis relative to the total amount held on NCB escrow accounts in T2.

The participant should have a claim only towards its local NCB for the funds held in the escrow account held by the same local NCB. This should be ensured via dedicated provisions in the contractual documentation governing the relationship between the local NCB and the participant.

BdF as Central Bank Solution Provider of the *Full DLT Interoperability* solution should not be subject to direct claims from participants for the funds held in escrow accounts (with the exception of those held by participants under their jurisdiction) as no direct contractual relationship is foreseen between the participants and Banque de France. This is derived from the principle that each NCB manages an escrow account for its participants.

The funding and defunding process would be performed manually by the PBD and the local NCB as the DL3S DLT has no direct technical connection to TARGET Services in an automated way during trials in the first step. The use of an escrow mechanism during the first step of trialling the Full-DLT Interoperability solution is a temporary construct implemented so that CeBM settlement would occur in TARGET Services (and not in BdF DL3S platform) in compliance with the Eurosystem's legal, policy and operational frameworks. As a result, final CeBM settlement during trials with both solutions would be reached in TARGET Services (T2) through defunding of those escrow accounts in the RTGS reflecting the updated balances following the settlement process in the new environments. This implies that exploratory work assessing these solutions would focus on the steps occurring in the market DLT (for the securities leg) and the DLT DL3S (for the settlement of the cash leg in exploratory cash token) and the technical DVP implemented between the transfer of exploratory liquidity on DL3S DLT and the securities delivery on the market DLT.

Defunding occurs at the end of the trial intraday process (by 15:30 CET in the standard case) on a net basis (reflecting all DVPs in trials settled by the participants) and exceptionally, for the market participants that request it, before 12:00¹⁶ to reflect specific DVPs on a gross basis. Funds are held on the escrow accounts by NCBs intraday only and the balance of the account is zeroed at the end of the day (by 15:30 CET) as part of the defunding process.

Additional time, until 17:00 CET (at the latest 18:00 and the interbank cutoff), can be available to zero NCB escrow accounts. Should that time be insufficient, NCBs would hold funds overnight until the funds can be returned to the relevant market participants (subject to MOC and AMICO consultation).

All steps mentioned – funding and defunding, will take place in T2 via liquidity transfer (camt.050).

3. Payment banks on DLT

Payment banks on DLT prefund escrow accounts held and managed by their local Eurosystem NCB in TARGET Services (T2) in order to receive the same amount in form of cash tokens on their wallet for use on the DL3S DLT. The settlement process in this case involves the following steps:

¹⁶ **Exceptional requests for early (gross) defunding** should be notified by the Payment bank on DLT to its NCB and the BdF operational team at least 48 hours in advance. On D-day, the ECT burning should occur no later than 11:00, for defunding to then take place by 12:00.



- At the start of trials, Payment banks on DLT fund their wallets in the DL3S DLT from their RTGS DCA to each participant's local NCB RTGS escrow accounts, thereby transferring ownership of these funds to their local NCB.
- Once confirmation is received that the funds have been credited to each of the participants' NCB RTGS accounts, Banque de France and NCBs active on DL3S¹⁷ instruct the minting of the same amount to the Payment bank on its DLT wallet in DL3S. As SPCB, BdF reconciles the number of minted ECT with the declaration provided by actives NCBs (form 1b) before opening the settlement window. BdF strongly recommends to send form 1b prior to 09:45 CET in order for BdF as Solution Provider to checks that the total amount held in escrow in T2 matches the total amount of exploratory cash tokens minted in DL3S (between 9:45 and 9:59 CET).
- Then DVPs can occur across the Market DLT and the DL3S DLT platforms via the HLTC interoperability mechanism.
- At the end of the trial settlement period (equivalent of EoD), or on an exceptional basis at the Payment bank on DLT's request upon completion of the technical DVP process, BdF and other involved NCBs start an alignment process, then the Payment bank on DLT's exploratory cash tokens are burnt and the relevant NCB defund their escrow accounts, transferring the EOD balance of the wallet to its participant (i.e. the participant's exploratory cash tokens are converted 1:1 in CeBM in T2).

4. Settlement process in trials step by step



Figure 1 - Settlement process in trials with the full-DLT Interoperability

¹⁷ NCBs can actively participate to DL3S and directly mint and burn liquidity for their eligible market participants during trials.





Figure 2 – Communication flows related to escrow process

During trials, the settlement process with the *full-DLT Interoperability solution* involves the following steps (cf. figure 1) and the following communications between market participants, NCBs and BdF (see figure 2 and proposed templates):

A. Funding of escrow accounts via Liquidity Transfer: participants will interact with their *local* NCB and each participant will fund its NCB's RTGS escrow account. Funds held in escrow on NCB RTGS escrow accounts belong to the NCBs, bear no interest, and are not be counted for compliance with minimum reserves requirements. Optionally, participants can also send a report to their local NCBs to inform them of their funding request (form 1a).¹⁸ Upon validation of the funding requests, including that (i) it was addressed in the proper format – e.g. via liquidity transfer and (ii) received on time before 09:00 (per the entry timestamp, not the settlement timestamp – bearing in mind that LTs cannot partially settle) NCBs will reject all funding requests from participants above the value restriction decided by the MIPC. If a funding request is rejected, NCBs will transfer the funds back to the market participant via liquidity transfer. Once the funding phase is complete, the local NCBs either (1) in case they are not active in DL3S report to BdF the overall balance of their escrow account and the

¹⁸ NCBs choosing to rely on an existing account may opt for this optional form to (i) keep track of the specific funding requests made by their participants and (ii) where their participants participate to trials with both the BDF and BDI solutions, identify for which solution the funding request is made. NCBs relying on two segregated escrow accounts can directly query the balance of their escrow accounts and identify the funding requests made and identify the solutions of relevance.



breakdown of funds held from their different payment banks participating to trials (form 1b) or (2) report to BdF only the overall balance of their escrow account (if they actively participate to DL3S). Based on the information received from forms 1b:

- Either BdF mints the equivalent amount funded by payment banks by crediting their wallets in DL3S by that equivalent amount in exploratory cash tokens (for its own participants and those of NBC with no access to DL3S or having an Observer role¹⁹);
- Or active NCBs directly perform the minting.

Reconciliations and checks are performed by BdF as Solution Provider to ensure that the total amount held in escrow in T2 matches the total amount of exploratory cash tokens minted in DL3S.

- **B.** A DVP with the full-DLT Interoperability solution is initiated by the market DLT based on trade information that are legally binding. Then, both the asset on the market DLT and the Exploratory Cash Tokens on DL3S are locked via *Hash-Time-Locked-Contracts* and the timelock starts;
- C. Exploratory Cash Tokens are unlocked and transferred to the payee through the revealed hash secret of HTLC (settlement of the cash leg of the technical DVP occurs in DL3S). If the timelock expires before the transfer of ECTs, both ECTs and the asset are unlocked and returned to the payer and the payee, respectively.
- **D.** The Asset is similarly unlocked and transferred to the payer through the revealed hash secret of HTLC. Should the DVP fail due to unforeseen reasons (other than lack of resources), a pre-agreed contigency procedure between BDF and the market DLT operator is initiated.

Steps B to D can be repeated during the trial intraday process for the settlement of other technical DVPs.

E. At the end of the intraday settlement window, the EoD is initiated including burning, alignment and defunding. First, all exploratory cash tokens on DL3S are burnt at the EoD milestone (i.e. 14h00 CET). Then, alignment occurs to redistribute CeBM between the different NCB escrow accounts in order to take into account the transfers which occurred during trial settlement phase (unless all transactions during the trial day are between participants of the same jurisdictions). As a prerequisite for the alignment, BdF sends a report to all NCBs (form 2a) with a breakdown of the liquidity transfers between NCB RTGS accounts to be performed. The updated balances on the NCB RTGS accounts correspond to the total amount of CeBM that each NCB will defund for their market participants. Then, after effective execution of realignments, BdF provides all observer NCBs with the breakdown of funds to be defunded for each of their market participants (form 2b) while active NCBs already have this information from their participation to DL3S. Then, each escrow account is defunded by the relevant NCB by liquidity transfer.

E.bis In exceptional cases and on request from the participant expressed at least 48h in advance (see form 3), defunding can occur on a gross basis for a specific DVP. Then, only

¹⁹ As detailed in section 6.1 of the Service Description, there are 3 levels of participation for a National Central Bank:

Level 1 - NCB not participating to DL3S

[•] Level 2 - NCB participating to DL3S with an observer role

[•] Level 3 - NCB participating to DL3S with an active role


that participant's exploratory cash tokens are burnt by BdF or the active NCB, before limited alignment (only for that participant's NCB escrow account) and partial defunding of that NCB's escrow account takes place.

In the case of need, **BDF as Central Bank Solution Provider will undertake any coordinating activities required** (this may be required depending on the number of NCBs involved).

5. Liquidity management in trials step by step



Overview of standard opening hours of settlement in trials (standard case)

Note: indicated timing is Central European Time – CET. Timing and steps occurring on the market DLT is not represented here. Only steps occurring in TARGET Services (blue) and in DL3S DLT (yellow) are shown here

Details of the operational process

- Funding of escrow accounts would occur during a <u>single daily window</u> ending at 09:00 on the trial day. After that, participants could not request additional funding during the trial daily process. Under a specific window from 09:00 until 09:30, all NCBs in the Eurosystem would report to BdF on the funding made by their respective participants in the RTGS. On the basis of these reports, either BdF or active NCB would mint exploratory cash tokens on DL3S, respectively, by 09:59.
- Settlement with the *Full-DLT Interoperability* solution, requiring an escrow mechanism, would be available from 10:00 until 14:00.
- Exceptional requests for early (gross) defunding could be processed during this window assuming:
 - That the participants issuing such request notified both BdF and their local NCB at least 48 hours in advance,
 - That the transfer of exploratory cash tokens as part of the settlement process that the participants wish to see reflected on a gross basis in T2-RTGS occurs *no later than 11:00*, for defunding to then take place *by 12:00*.



- BdF and the local NCB(s) of the participants issuing such a request reserve the right to reject this request in case of capacity constraints limitations and may ask those participants to schedule their trial operations at another point in time or that they rely on the regular EoD procedure below.
- From 14:00 until 15:30, the End of Day trial procedures would be conducted: no new transactions in trials from market participants would be processed then and access to DL3S DLT would no longer be available to market participants. For the *Full-DLT Interoperability* solution, requiring an escrow mechanism, the EoD process would involve burning all remaining²⁰ exploratory cash tokens issued in the morning and transferring CeBM funds held by NCBs on their escrow accounts back to market participants (defunding). This process requires that all NCBs manually align their escrow accounts on the basis of the information provided by BDF, before manually initiating liquidity transfers to each of their market participants involved with trials with either of the two solutions (*estimated end: by 15:30*).

No CeBM funds shall remain on the RTGS escrow accounts used by NCBs overnight, There would be no risk for the daily EoD processes in T2-RTGS, since exploratory work-related incidents would not (specifically) be treated as a TARGET Services incident with no delay to the cut-off possible (unless they are part of a more general incident affecting TARGET Services).

6. BdF escrow account references

FR RTGS participants active in the Exploratory Work should use the following BdF escrow accounts:

| Full DLT solution | TIPS Hash Link BdF Escrow account | Trigger Chain solution |
|--|--------------------------------------|------------------------|
| RFREURBDFEFR2TTEM-TEM | RFREURBDFEFR2TTEM-SPE | Not applicable |
| In case NCB use standard RTGS accounts (and not CB accounts), they should add this account in their LTG: | | |
| FRLBDFEFR2TTEM-MNBC | | |

²⁰ Where some exceptional requests for defunding have been processed by 12:00, some exploratory liquidity issued in the morning will have already been burnt by CBSPs.



TEMPLATE REPORTS FOR ESCROW PROCESS

| Please use the attached model forms: | Q | |
|--------------------------------------|---|--|
| | | |

1. Forms sent for registration prior to trials

Form 0a - Registration of NCB escrow account to CBSPs: this template defines the details of the RTGS CB account or the RTGS DCA that each NCB intends to use for implementing the escrow mechanism. NCBs will not be required to set a new dedicated account in the RTGS for the purpose of exploratory work and may rely on an existing account to implement the escrow mechanism.

| | Escrow account for BDF |
|---|------------------------|
| NCB | |
| NCB BIC | |
| NCB Account Number ¹ | |
| RTGS DCA ²³ /RTGS CB account | Choose an item. |

Form Ob - Registration of market participant's RTGS DCA for escrow process: this template defines the details of the RTGS DCA that each market participants intends to use for implementing the escrow mechanism. Market participants are not required to set a new dedicated account in the RTGS for the purpose of exploratory work and may rely on an existing account to implement the escrow mechanism.

| | RTGS DCA used for BDF |
|------------------------------|-----------------------|
| Market participant | |
| Market participant party BIC | |
| RTGS DCA account number | |

1 Please consider the T2 naming convention for the setup of new accounts for the escrow mechanism

2 Each NCB with an RTGS DCA registered for the escrow process in trials can search the LTGs and add their RTGS DCA to the relevant LTG.

3 Each NCB will manage Liquidity Transfer Groups comprised of eligible market participants' RTGS DCAs registered for the escrow process and, where applicable, NCB's RTGS DCA(s) and registered for the escrow process in their jurisdiction.

2. Forms to be used during the funding process / Start of Day (SoD) processes for Trial

Form 1a (optional) – Market participants' funding requests to their local NCB:

NCBs choosing to rely on a single existing account may opt for this optional form to

(i) keep track of the specific funding requests made by their market participants and



(ii) where their market participants participate to trials with BDF solution, identify for which solution the funding request is made.

| | Funding used for BDF |
|--|-------------------------------|
| Date | Click or tap to enter a date. |
| Market participants name | |
| Market participant BIC | |
| RTGS DCA | |
| Amount funded on NCBs escrow account = amount of Exploratory Liquidity | |

Form 1b (mandatory) – minting requests: NCBs provide this form to BdF including the overall amount received during funding on their escrow account and the breakdown of funds received and held from each payment bank for all valid funding requests.

On that basis, BdF will mint exploratory cash tokens on Full-DLT interoperability solution for its own participants and those of NCB with no access to DL3S or having an Observer role.

In the case of NCBs that are active on the Full-DLT interoperability solution, they have to submit form 1b to inform on the overall amount received during funding.

From: a local National Central Bank having received funds before 09:00 am from one or several market participants participating in trials

To: the Central Bank acting as SPCB for the trials Purpose:

- (i) trial SoD reconciliation between funds escrowed and Exploratory cash tokens
- (ii) for the reporting CB not performing the minting to specify the amount to be minted for each market participant in the wallet.

BdF strongly recommends to send form 1b prior to 09:45 CET in order for BdF as Solution Provider to checks that the total amount held in escrow in T2 matches the total amount of exploratory cash tokens minted in DL3S (between 9:45 and 9:59 CET).

| Business date | Click or tap to enter a date. |
|---|-------------------------------|
| Reporting NCB entity [Party BIC] | |
| Solution Provider | Choose an item. |
| Total amount escrowed = Exploratory cash tokens | |
| to be minted | |

| Details per market participants (not necessary if local NCB is active in DL3S) | | |
|--|--|--|
| Payment Bank (PB) [Party BIC] Amount escrowed by PB on NCBs escrow account | | |
| | | |
| | | |
| | | |



3. Realignment transfer form for End of Day (EoD) procedures

Form 2a (mandatory) – alignment procedures: BDF provide this form to NCBs including the amount(s) to transfer to escrow accounts of other NCBs via liquidity transfers prior to defunding.

From: BdF as SPCB for the trial

To: a local National Central Bank with one or several payment bank(s) participating in the trials Purpose: request to perform some inter-NCB realignment transfers as prerequisites for the defunding process. BdF strongly recommends to process inter-NCB realignment transfers prior to 15:00 CET in order to secure defunding process before 15:30 CET.

Once realignment processed (before 15:00 CET), NCBs send back the filled form 2a with an updated status of the Liquidity transfer.

| Business date | Click or tap to enter a date. | |
|--|-------------------------------|--|
| Instructing Solution Provider | Choose an item. | |
| NCB entity involved in the realignment process (Party BIC) | | |
| transfers to perform (Y/N) | Choose an item. | |

| Details of the liquidity transfers to be performed | | | |
|--|-----------------------|--------|------------------------|
| Account to be credited | | | |
| (RTGS Account Number | | | |
| of the credit NCB) | BIC of the credit NCB | Amount | transfer settled (Y/N) |
| | | | Choose an item. |
| | | | Choose an item. |
| | | | Choose an item. |

Form 2b (mandatory) – defunding launch after successful alignment: BdF provides this form to NCBs including the breakdown of funds to defund to each of the NCBs' participants. In the case of NCBs being active on DL3S, form 2b serves only as the greenlight to defund.

From: BdF acting as solution provider for the trial

To: a Central Bank with one or several payment bank(s) participating in the trials

Purpose: provide the details of the defunding liquidity transfers to be performed, which will credit the RTGS DCA of the domestic payment banks and leave the local escrow account empty.

Once defunding processed (before 15:30 CET), NCBs send back the filled form 2b with an updated status of the Liquidity transfer.

| Click of tap to enter a date. |
|-------------------------------|
| Choose an item. |
| |
| |

| Details of the liquidity transfers to be performed | | |
|--|--------|------------------------|
| Payment bank to be credited (Party BIC) | Amount | transfer settled (Y/N) |
| | | Choose an item. |
| | | Choose an item. |
| | | Choose an item. |

4. Form sent 48h in advance of the trial process – special request for early defunding

Form 3 - request for defunding before the standard EoD process during the trial settlement window: this template details the request made by a market participant to benefit from early defunding during the trial intraday process. This request can be accepted subject to the following:

- That the participants issuing such request notified their local NCB at least 48 hours in advance, that swiftly transfers the information to BdF as SPCB.
- That the transfer of exploratory liquidity as part of the settlement process that the participants wish to see reflected on a gross basis in T2-RTGS occurs no later than 11:00, for defunding to then take place by 12:00.
- BdF and the local NCB(s) coordinate to organise the ECT burning, the defunding and any potential realignment.
- BdF and the local NCB(s) of the participants issuing such a request reserve the right to reject this request in case of capacity constraints limitations and may ask those participants to schedule their trial operations at another point in time or that they rely on the regular EoD procedure.

| Business date (at least 48 hours before) | Click or tap to enter a date. |
|--|-------------------------------|
| Instructed Solution Provider | Choose an item. |
| NCB entity requested to defund (Party BIC) | |

| Details of the liquidity transfers to be performed | | |
|--|--------|------------------------|
| Payment bank to be credited | | |
| (Party BIC) | Amount | transfer settled (Y/N) |
| | | Choose an item. |
| | | Choose an item. |
| | | Choose an item. |



7.2.3. Playbook (Test Phase 2A)

Bespoke document established once use case defined with the participants of the experiment or trial.

7.3. Contractual framework

Legal documents available for Eligible Market DLT Operator and /or Eligible Market Participant.

- 7.3.1. Agreement between BdF as National Central Bank and Eligible Market Participant under French jurisdiction
- 7.3.2. Agreement between BdF as National Central Bank and Eligible Market DLT Operator under French jurisdiction
- 7.3.3. Agreement between BdF as Solution Provider and Eligible Market DLT Operators
