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

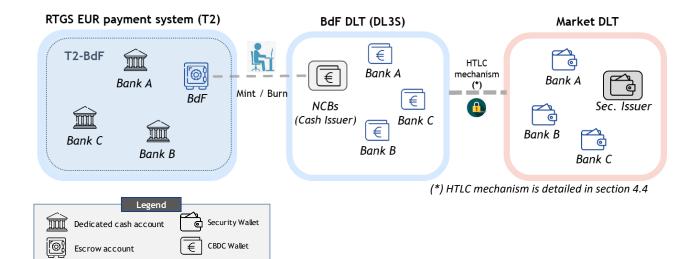
This document provides a detailed overview on the Cash DLT key features in terms of organisation and services. It covers the overall Cash DLT platform set up and key interactions with RTGS TARGET systems. As such it provides (more specifically under its onboarding procedures in annexes) the specification 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

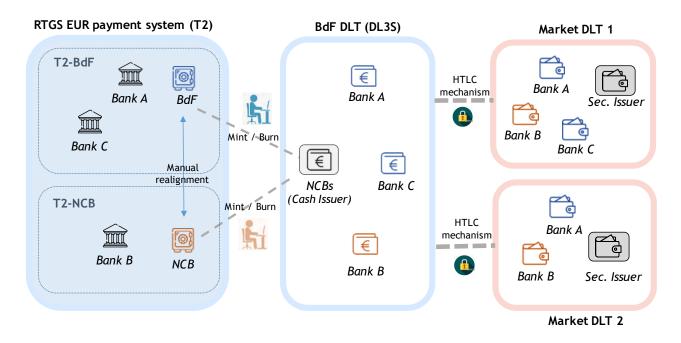
Banque de France will operate the Cash DLT ("DL3S") interconnected with Market DLT(s) from which tokenised financial instruments transactions will trigger payments in ECT. This DLT infrastructure is defined as the Interoperability Model where the Market(s) and Cash DLTs are operated independently from 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 typology	ECT Issuer	Dedicated Cash Wallet owner	Dedicated Cash Wallet manager	Dedicated Cash Wallet custodian	Dedicated Cash Wallet user	National ECT supervisor ¹⁰
NCBs	х	х	х			х
Payment		X		x		
bank on						
DLTs						
Clients					X	
of						
Payment						
bank on						
DLTs						
Other		X				
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

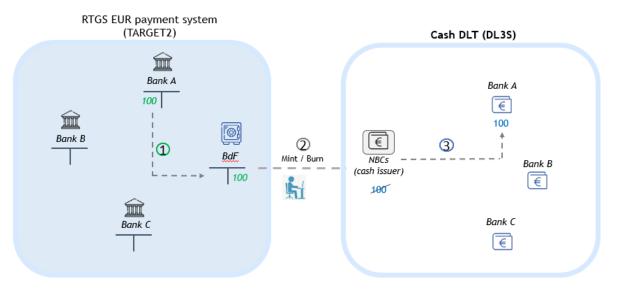
The overall process is conducted as per the below:

- 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.

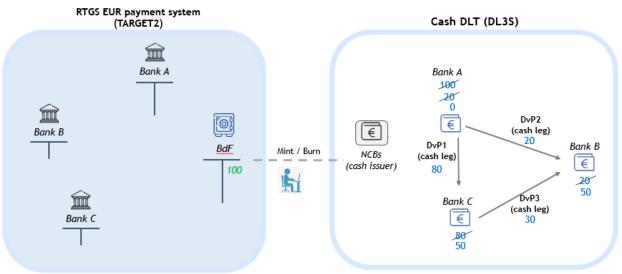


FUNDING AND DEFUNDING PROCESS IN NET FOR DVP ON DLTS EXAMPLE WITH FRENCH COMMERCIAL BANKS FOR ILLUSTRATION

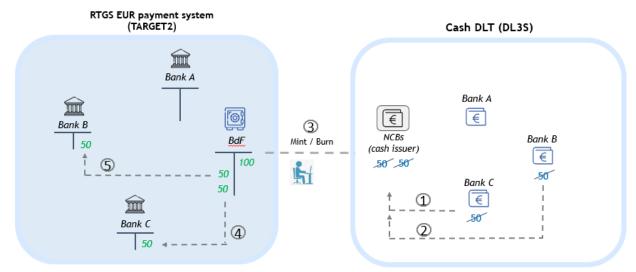


STEP 1: MINT OF CASH TOKEN BY BDF

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:

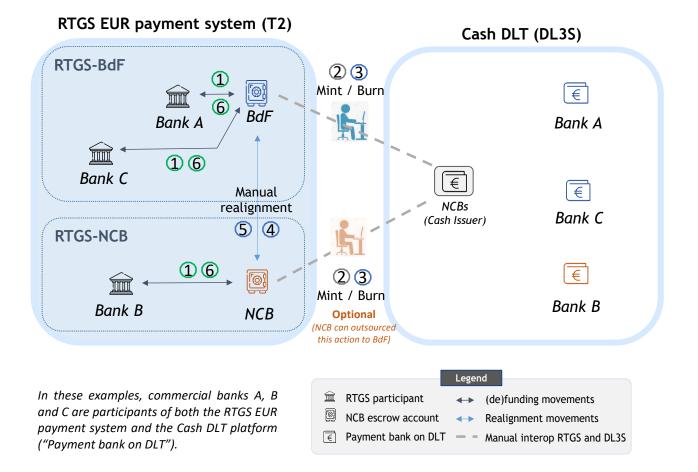
- That the Payment bank on DLT issuing such request notified its NCB and the BdF operational team at least 48 hours in advance,
- That the ECT redemption request that the participants wish to see reflected on a gross basis in the RTGS occurs no later than 11:00, for defunding to then take place by 12:00.
- 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.



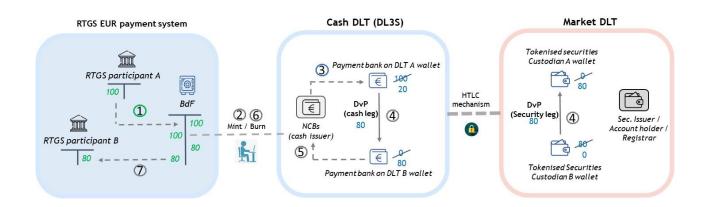
3.5.2. Security Delivery versus ECT Payment (DvP) use case

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.



Lege	end
Dedicated cash account of RTGS participant	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.

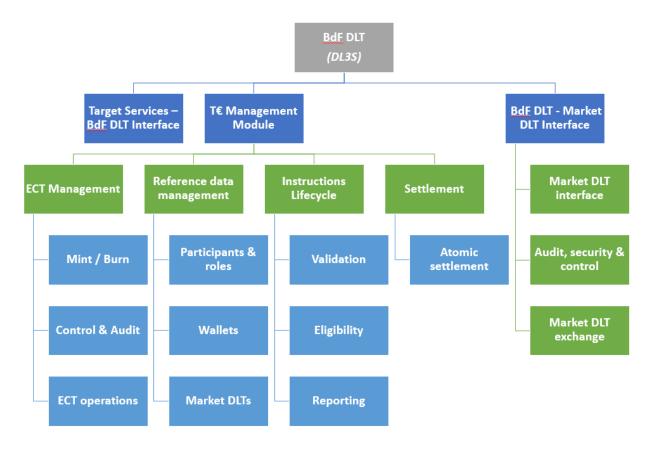
In the event of an extraordinary termination of the experiments and trials, eligible market participants and eligible market DLT platform operators may only be informed after such termination has occurred.



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;

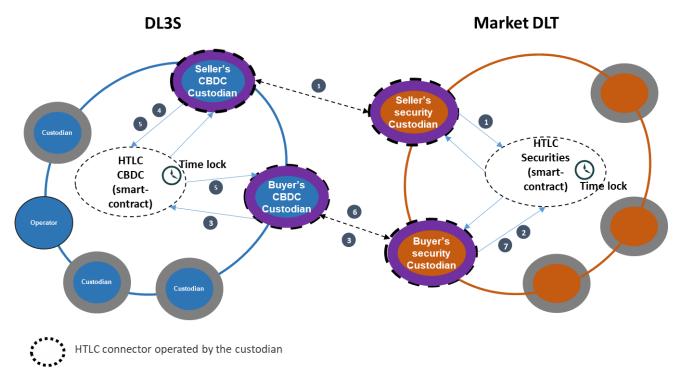
¹⁵ See the eligibility criteria details for Market DLT based on permissionless blockchain



- 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

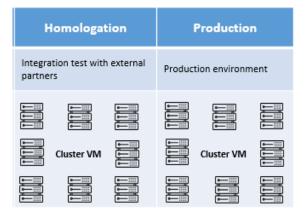
The Cash DLT solution hosting is provided on TWISTERX environment (IaaS offer).

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	v1.7.5
Date	31.05.2024

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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.

- Target AudienceThere is only one handbook addressing all DL3S actors: national central banks
(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, theDocumentationservice 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.

PageEvery page in the UHB parts has a similar page layout. You can find four differentLayoutelements:

- 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

ActionBusiness use cases are divided into single action steps. These action steps areStepsnumbered 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			
BANQUE DE FRANCE EUROSYSTÈME	DL3S	Monetary strategy Financial stability	
		Email * Email Password *	
		Password	

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 QA Monetary strategy Financial statingy Economic Financial statingy Economic Strategy Economic Business window Open for All Statingy	ser @ BDF d Cash Wallet Owner d Cash Wallet Manage
⑦ Dashboard		
Dedicated Cash Wallets	6 Active Dedicated Cash wallets managed 10 CBDC Operations managed settled	
T2 accounts		
GBDC Operations		
n Global	0 Active Dedicated Cash wallets owned 31 960 €	
n External network		
⑦ Reporting		
4 eyes pending validation	Active Dedicated Cash Wallets OWNED MANAGED	
路 User administration		
Parameters		

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 the creation of dedicated cash wallets 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 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*



⑦ Dashboard	
Dedicated Cash Wallets	Create a Dedicated Cash Wallet
T2 accounts	Owned
GBDC Operations	Managed

 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*

⑦ Dashboard	
Dedicated Cash Wallets	Create a Dedicated Cash Wallet
T2 accounts	Owned
BCBDC Operations	• Managed
<u>n</u> Global	National supervised

- T2 Accounts tab:
 - Enables the creation of dedicated cash wallets if the participant has the role of *Dedicated Cash Wallet Manager*



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*

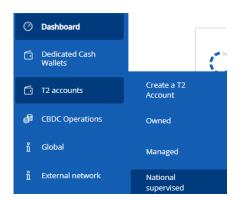


 Enables to see the details of the T2 accounts references managed by the participant and links of the T2 account when they exist, if the participant has the role of *Dedicated Cash Wallet Manager*

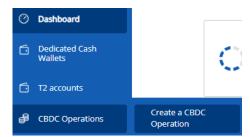




 Enables to see the details of the T2 accounts references supervised by the participant and links of the T2 account when they exist if the participant has the role of *National CBDC Supervisor*, the role of *DL3S Operator* or the role of *CBDC Supervisor*



- 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
 - Enables the creation of CBDC Operations if the participant has the role of *Dedicated Cash Wallet Manager, Dedicated Cash Wallet Custodian* or *Dedicated Cash Wallet Owner*

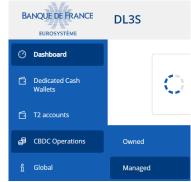


 Owned subtab enables to see the details of CBDC transfers and CBDC redemptions a Dedicated Cash Wallet Owner is involved in

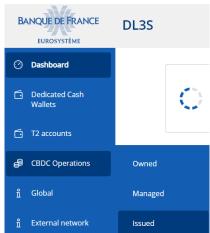




 Managed subtab enables to see the details of the CBDC transfers and CBDC redemptions executed by the participant with the *Dedicated Cash Wallet Manager* role or the *Dedicated Cash Wallet Custodian* role on the behalf of its clients

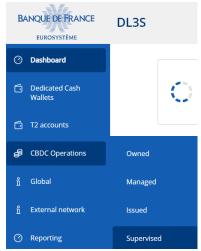


Issued subtab enables to see CBDC issuances executed by the participant with the CBDC Issuer role



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



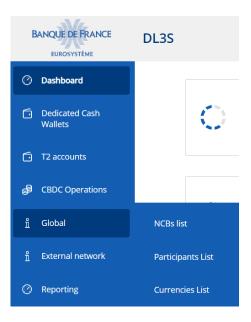


• *National supervised subtab* enables to see CBDC transfers and CBDC redemptions supervised in his jurisdiction by the participant with the *National CBDC Supervisor* role.

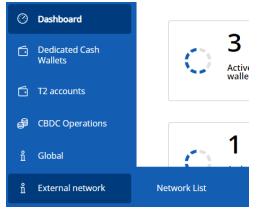
BANQUE DE FRANCE EUROSYSTÈME	DL3S
⑦ Dashboard	
Dedicated Cash Wallets	\bigcirc
T2 accounts	
GBDC Operations	Owned
<u>ាំ</u> Global	Managed
ាំ External network	Issued
⑦ Reporting	National supervised

- 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.



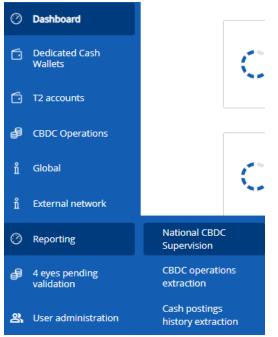


- External Network tab:
 - Is accessible to every type of *roles* in DL3S but some specificities remain inside the subtabs according to the *roles*. Please refer to the dedicated sections of this user hand book to dig into the specificities.
 - Enables to visualize the external DLT platforms authorised 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 cash postings history for the *DL3S Operator*, the *National CBDC Supervisors* and the *CBDC Supervisors*.



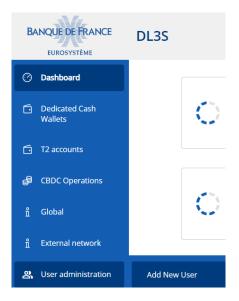


- 4 eyes pending validation tab:
 - Is accessible to every participant concerned by the 4-eyes process e.g. Dedicated Cash Wallet Owner, Dedicated Cash Wallet Manager and Dedicated Cash Wallet Custodian
 - According to action you able to perform on DL3S, this tab will contain the following subtab *Dedicated Cash Wallets, CBDC Operations, T2 Accounts & Whitelists*
 - Dedicated Cash Wallets subtab will allow the approval or the reviewal of newly created dedicated cash wallets
 - CBDC Operations subtab will allow the approval or the reviewal of newly created CBDC Operations
 - *T2 accounts subtab* will allow the approval or the reviewal of newly referenced T2 accounts and newly links to T2 account.
 - *Whitelists subtab* will allow the approval or the reviewal of newly whitelisted participants to a network



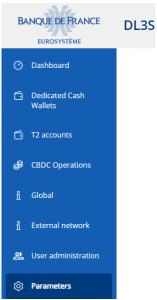


- User administration tab:
 - Is accessible only to the roles *DL3S Operator*, *Dedicated Cash Wallet Manager* and *Dedicated Cash Wallet Custodian*
 - o Enables to create credentials for a client allowing the client to access to DL3S



- 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)

Parameters

Parameters

Business Day	12-31-2022 🖍	
Business Window	Open for All 💉	
Time Lock	240	
		CBDC full redemption

2.2.2 Top Band Structure

BANQUE DE FRANCE DL3S QA	Monetary strategy Financial Financial	Calendar date 05-21-2024 12:09:24 Business date 05-14-2024 Business window Open for All	singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager & +2
EUROSYSTÈME			

From left to right:

- Banque de France Eurosysteme Logo
- DL3S logo
- The environment
- 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

B	ANQUE DE FRANCE EUROSYSTÈME	DL3S 💽	A)	Monetary strategy Financial stability		Calendar date 05-21-2024 13:36:10 Business date 05-14-2024 Business window Open for All	singleuser @ BDF Dedicated Cash Wallet Ov Dedicated Cash Wallet Ma +2	vner inager 🖧
Ø	Dashboard		_					
Ó	Dedicated Cash Wallets		Active Dedicated Cash wallet	s managed	J	10 CBDC Operations managed settled		
Ó	T2 accounts							
₽	CBDC Operations							
i	Global		Active Dedicated Cash wallet	s owned		31960 € Total outstanding amount		
ñ	External network							
Ø	Reporting							
4	4 eyes pending validation		Active Dedicated Cash Wallets OWNED MANAGED					
8	User administration							
Ø	Parameters							

- Active Dedicated Cash Wallet managed corresponds to the number of active 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
- Active Dedicated Cash Wallets owned corresponds to the number of active 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	DL3S 😱	Monetary strategy Financial stability	Economic services		Calendar date 05-21-202 Business date 05-14-202 Business window Open f	4	singleuser @ Op DL3S Operator C
⑦ Dashboard	National Central Bar	ks					
 Dedicated Cash Wallets 	National(Central Banks			Filter		Q
T2 accounts	≑ BIC	✦ Name	🗢 Country Code	🗢 Central Bank Cod	e 🗢 Country Name	🗢 Is partici	pating
A		Oesterreichische Nationalbank	AT	OeNB	Austria	no	
CBDC Operations		National Bank of Belgium	BE	NBB	Belgium	no	
n Global	CCBCNSPPXXX	Consortium Central Banks	CS	ССВ	Country C	yes	
		Central Bank of Cyprus	CY	СВС	Cyprus	no	
n External network		Deutsche Bundesbank	DE	ввк	Germany	no	
	CBDEDXXXDLT	Central Bank D	DX	CBD	Country D	yes	
Reporting		Eesti Pank (Central Bank of Estonia)	EE	EP	Estonia	no	
4 eyes pending		Banco de España	ES	BDE	Spain	no	
validation		European Central Bank	EU	ECB	European Union	no	
& User administration		Suomen Pankki (Bank of Finland)	FI	BOF	Finland	no	
	BDFEFR2TXXX	Banque de France	FR	BDF	France	yes	
Parameters		Bank of Greece	GR	BOG	Greece	no	
		Hrvatska narodna banka (Croatian National Bank)	HR	HNB	Croatia	no	
		Central Bank of Ireland	IE	CBI	Ireland	no	
		Banca d'Italia	IT	BDI	Italy	no	
	CBLXLLXXDLT	Central Bank L	LL	CBL	Country L	yes	

3.2.2 Participants List tab

3.2.2.1 Description

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

BANQUE DE FRANCE EUROSYSTÈME	DL3S 🐢			y Really	Economic services	Busir	ndar date 05-21-20 ness date 05-14-20 ness window Open	024 Sir	n gleuser 35 Operati
🖉 Dashboard	Participants								
Dedicated Cash Wallets	Participan	ts					Add an	entity	ve
T2 accounts						Filt	er		Q
CBDC Operations	🗢 Entity ID	🗢 Туре	Short Name	Country Code	Roles	Valid From	Valid To	Blocking St	atus
n Global	BDFEFR2TXXX	BIC	BDF	FR	Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer National CBDC Supervisor	01-01-2022			
	CBDEDXXXDLT	BIC	CBD	DX	National CBDC Supervisor	01-01-2022	1		
 Reporting 4 eyes pending validation 	CBLXLLXXDLT	BIC	CBL	LL	Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager GBDC Issuer National CBDC Supervisor	01-01-2022	1		
User administration Parameters	CCBCNSPPXXX	BIC	NCBISSUER	CS	Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer CBDC Supervisor	01-01-2022	i		

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.

By clicking on the inactive button on the top right, one can find the list of all participants that are no longer active or no yet active.



3.2.2.2 Adding a new entity

BA	NQUE DE FRANCE EUROSYSTÈME	DL3S 💁	Monetary strategy Financial stability	Calendar o EconomBusiness d services Business v	ate 05-14-		singleuser @ Ope DL3S Operator	rator
Ø	Dashboard	Participants > New Entit	ty					
G	Dedicated Cash Wallets	New Entity						
G	T2 accounts	INFOS		Valid From *		Valid To	Ē	
₽	CBDC Operations	Entity ID *		NCB responsible		~		
ñ	Global	Type *		Name *				
ů	External network	Roles *	~					
Ø	Reporting		•					
₽	4 eyes pending validation	* Required Field						
ക	User administration	CANCEL	JBMIT					
ര	Parameters							

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 💁		Financial stability	Financial		Business date 05-14-2024 Business window Open for All		singleuser @ PBG Dedicated Cash Wallet Owner Dedicated Cash Wallet Custod	
⑦ Dashboard	Clients								
Dedicated Cash Wallets	Clients						Add a client	Inactive	
🗂 T2 accounts						Filter		Q	
CBDC Operations	Entity ID	🖨 Туре	Short Name	Country Code	Roles	Valid From	Valid To	\$ Block	
	00CLI1PBGINVESTOR00000001	LEI	PBG-CLI1		Dedicated Cash Wallet User	01-01-2022	1		
ng Global	00CLI2PBGINVESTOR00000002	LEI	PBG-CLI2		Dedicated Cash Wallet User	01-01-2022	1		
n External network	IDTESTCL14	LEI	PBG-CLI4		Dedicated Cash	05-01-2024			
4 eyes pending	IDIESTCE 4	CC1	PBG-CLI4		Wallet User	05-01-2024	1		
validation	TEST	LEI	TEST		Dedicated Cash Wallet User	01-04-2023	1		
Subser administration									

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
- Currency corresponds to the currency of the CBDC transferred
- *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

BA	ANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Monetary strategy Financial stability	Calendar date 05 Business date 05 Business window	-14-2024	00 singleuser @ Dedicated Cash Dedicated Cash	9 PBG n Wallet Owner 9 n Wallet Custodian
Ø	Dashboard	<u>Clients</u> > New Client					
	Dedicated Cash Wallets	New Client					
Ó	T2 accounts	INFOS		Valid From *	Ē	Valid To	
₽	CBDC Operations	Client ID *			Type *		~
ñ	Global	Name *			Roles *		
ñ	External network				Dedicated Cash	Wallet •	
đ	4 eyes pending validation	* Required Field					
න	User administration	CANCEL	UBMIT				
Ø	Parameters						

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 .
- Valid From, the beginning of the client validity date
- Valid to, the end of the client validity date (not mandatory)



3.2.4 Currencies List

BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	Monetary strategy Financial stability	Economic services	Calendar date 05-21-2024 Business date 05-14-2024 Business window Open fo	singleuser @ Operato
🕐 Dashboard	Currencies				
Dedicated Cash Wallets	Active Cu	rrencies		Add a	currency
T2 accounts	🗢 Short Name	🗢 Name	Symbol	Valid From	Valid To
BCBDC Operations	EUR	Euro	€	01-01-2022	ľ
n Global					
ាំ External network					
⑦ Reporting					

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

Through this tab, one can add a network, whitelist a DL3S participant and add an external participant.

BANQUE DE FRANCE EUROSYSTÈME	DL3S 🐢		Monetary strategy Financial stability	Economic services		Bus	endar date 05-07-2024 14:51:06 iiness date 01-02-2023 iiness window Open for All	singleuser @ Operator DL35 Operator
Ø Dashboard	Networks							
Dedicated Cash Wallets	Active Networks						Add a network Inactive	•
T2 accounts	Network ID	Network Name	Owner Name	Valid From	Valid To	Whitelisted Participants	Add Participants	
B CEDC Operations	MarketDLT1	Market DLT 1	Market DLT Owner 1	01-01-2022	1	Views Participants	1	

- The *Network List tab* gives the list of external networks registered in DL3S with their characteristics (ID, Name, Owner Name, Validity dates, whitlisted participants according to the visibility rules)
- 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 Adding a new external network

Only the **DL3S Operator** can add a new external network by clicking on the button add a network.

BAI	NQUE DE FRANCE EUROSYSTÈME	DL3S 💁	strategy Financial stability	EconBusiness			singleuser @ Operator DL3S Operator
Ø	Dashboard	<u>Networks</u> > New ne	twork				
Ó	Dedicated Cash Wallets	New netw	vork				
G	T2 accounts	INFOS		Valid From *	Ē	Valid To	Ē
₽	CBDC Operations	Network ID *		Network Na	ne *		
ñ	Global	Owner Name *					
ñ	External network						
Ø	Reporting	* Required Field					
₽	4 eyes pending validation	CANCEL	SUBMIT				
옰	User administration						
٢	Parameters						
ion e:	xternal / v1.6				46		



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 Whitelisting a DL3S participant

Only the *DL3S Operator* and *DCW Manager* can whitelist a DL3S participant on a network.

By clicking on the *views participants* link, one can access to the list of DL3S participant whitelisted and authorized to exchange with the network.

BANQUE DE FRANCE EUROSYSTÈME	DL3S 💁	Monetary strategy Financial stability	Economic services	Bu	lendar date 05-07-2024 15:05:14 siness date 01-03-2023 siness window Open for All	singleuser @ Operato DL35 Operator &
O Dashboard	Whitelist					
Dedicated Cash Wallets	Add a Participant Inactive					
🗂 T2 accounts	÷ Entity ID		Valid From	Valid To		
B CBDC Operations	PBGSGGXXDLT	BDFEFR2TIOX	01-03-2023	1		
🖞 Global	PBSOFROXDLT	BDFEFR2TXXX	01-03-2023	1		
🛔 External network						
② Reporting						
4 eyes pending validation						
路 User administration						

By clicking on the *Add a Participant* button, one can whitelist a new DL3S participant to the network.

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Economic strategy Economic strategy envices	Extender Ater (80-07-3024 15-07-59 singleuser (8 Operator Business state 07-02-3023 DAS Constor & CAS Constor Business window Open for All DAS Constor & C
O Dashboard	Whitelist > Add new participant	
Dedicated Cash Wallets	Add new participant to MarketDLT1 whitelist	
T2 accounts	INFOS	Valid From *
CBDC Operations	Entity ID + Manager ID +	
<u>n</u> Global	+ Required Field	
n External network	CANCEL SUBMIT	
Reporting		
4 eyes pending validation		
🖧 User administration		
Parameters		

One has to fill in:

- Entity ID column is the participant ID in DL3S
- *Manager ID* column is manager ID of the entity ID in DL3S. It is to be noted that manager ID is automatically filled with the BIC of the manager whitelisting if the whitelisting is done by a **DCW** *manager*
- Valid From, the beginning of the whitelist validity date
- Valid to, the end of the whitelist validity date (not mandatory)

UE DE FRAN UROSYSTÈME	CE							
BANQUE DE FRANCE EUROSYSTÈME	DL3S	QA		Monetary strategy Financial stability	Economic services	Calendar date Business date Business windo		singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager & (+2)
② Dashboard		Whitelist > Add new participant						
Dedicated Cash Wallets		Add new participant to	o MarketDLT	1 whitelist				
T2 accounts		INFOS				Valid From *	Valid To	Ē
BDC Operations		Entity ID *	Manager ID * BDFEFR2TX0					
n Global		* Required Field						
n External network		CANCEL						

It is to be noted that for a *DCW manager*, the whitelisting will follow the 4-eyes process on the contrary of *DL3S Operator*.

A newly whitelisted participant will appears in the inactive view at first. It will appear in the active view at the valid from date entered when whitelisting the participant.

Once a participant is whiteslited, the whitelisting can be ended by entering a valid to date to the envisaged date.

3.3.3 Adding an external participant

To be able to fully interact with an external network, one has to register a participant of this external network on DL3S. It will enable the participant to send messages to the external participant on the network. This capability to add an external participant to a network is available for **DL3S Operator**, **DCW Manager** and **DCW Custodian**.

BANQUE DE FRANCE EUROSYSTÈME	DL3S 😡		Monetary strategy Financial stability	Economic services		Calendar date 05-07. Business date 01-03. Business window Op	2023 Dedicated Cash Wal	iet Owner & let Custodian &
O Dashboard	Networks							
Dedicated Cash Wallets	Active Networks						Inactive	
T2 accounts	Network ID	Network Name	Owner Name	Valid From	Valid To	Whitelisted Participants	Add Participants	1
CBDC Operations	MarketDLT1	Market DLT 1	Market DLT Owner 1	01-01-2022	1	Views Participants	1	
n Global	RecetteAurore	RecetteAurore	Escouade DL3S	01-01-2023	1	Views Participants	1	
	marianne_dl3s	DL35	BDF	01-01-2022	1	Views Participants	1	
🖞 External network								
d 4 eyes pending validation								
路 User administration								

By clicking on the pencil add a participant, one can access to the following form:

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Economic services	Calendar date: 05-07-2024 15:29:04 singleuser @ PBs Business date: 01-03:2023 Desicated (san Waire Currer Business window Open for All Desicated Can Waire Currer
O Dashboard	Networks > Add participants to the network	
Dedicated Cash Wallets	Add participants to the network	
🗂 T2 accounts	Network Infos	
B CBDC Operations	Network ID * Network Name * Owner Name * MarketDLT1 Market DLT 1 Market DLT 0umer 1	
n Global		
<u><u>n</u> External network</u>	Links	
4 eyes pending validation	Existing Endty PE055G0X0LT Download configuration for PB035GXV0LT	
왔 User administration		
Parameters	Entity ID + Download configuration template file Import configuration file Import configuration file	
	* Required Field	

To add an external entity, it is needed to:

- Fill in the entity ID of the external participant on the Market DLT
- To download the template of the configuration that needs to be imported
- To import a file of configuration containing, authentication details to connect to Market DLT

This procedure will allow the market DLT to receive message from DL3S. To fully onboard an external participant on an external market DLT, he must also be able to send message to DL3S. In order so, it is needed to create a user for an external participant to fully onboard it (see <u>3.5.2.2</u>).



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.

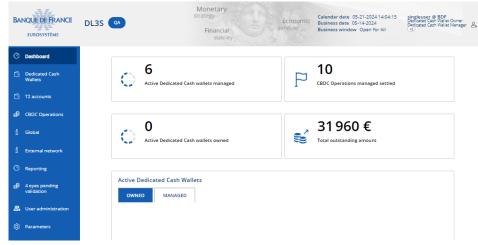
CBDC supervision

Currency

Participant	Total owned	Total clients	Total owned + clients
PBSOFRXXDLT (05-21-2024 14:03:03)	21 360	70	21 430
PBGSGGXXDLT (05-21-2024 14:03:03)	10520	10	10530
Total	31 880	80	31 960

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 Cash postings 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

The **user administration** tab accessible in the left-hand sidebar of the DL3S UI, is available for every **Dedicated Cash Wallet Custodian**, **Dedicated Cash Wallet Manager** 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.



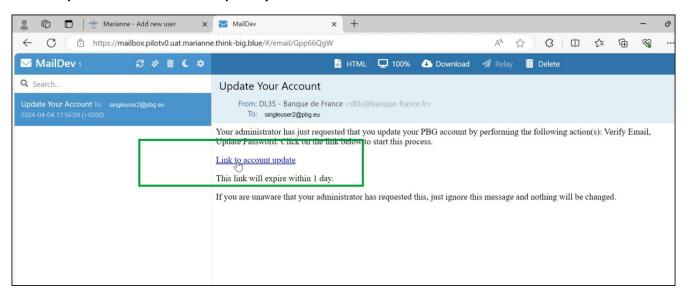
3.5.1 Adding an internal User

Through the UI, *DL3S Operator*, *DCW manager* or *DCW Custodian* are able to create a new user to a DL3S participant. One has tu ensure that the type is DL3S.

- Click on the User administration tab, Create a new user subtab
- Ensure the type DL3S is selected.
- For adding a new user to a participant, one has to fill in:
 - User email that will correspond to the email of the user
 - Username corresponds to the name that will be displayed in the UI on the top right of the dashboard to identify the user created
 - o Entity is the BIC or the LEI of the BIC within which the user will be integrated
- Then the following steps will happen taking the example of a new user created for payment bank named PBG:

IDENTIFICATION		
User email : singleus	er2@pbg.eu	
USER INFORMATIO	N	
Username* : PBG Entity* : PBGSGGXXI	т	
	expected result : Creation of the new user for PBG	SUBMIT

a) Connected on the Mailbox of the email of the new user : Click on the link **"Link to account update"** received on the **"Update your Account"** email



b) Following the previous link, you will get to this page



Perform the following action(s): Verify Email, Update Password

» Click here to proceed

c) Click on set up the account by first changing the password

A You need to change your password to activate your account	nt.
New Password	
	۲
Confirm password	
	۲
More than 12 characters	
An upper case letter	
A lower case letter	
A special character	
A digit	
Sign out from other devices	

Submit

d) Complete the profile with the expected information

	Ô	🔲 🗎 🛨 Marianne	- Add new user	🗙 🛛 🔀 MailDev	🗙 🗰 Sign in t	to PBG ×	+					-	ŋ
\leftarrow	C	https://aut	n.pbg.pilotv0.uat.m	narianne.think-big.blue/realms/	PBG/login-actions/required	-action?execution=UP	aø A	4 23	G	£≡	Ē	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
				A You need to upd	late your user profile to	activate your account	t.						
				Email *									
				singleuser2@pbg.eu									
				Company *									
				PBG									
				First name									
				Jean									
				Last name									
				John									
			L L					1					
					Submit								

e) Acknowledge the GDPR notice to finalize the activation of the account



	Ø	1 ±	Marian	ine - A	dd new	user			×		MailDe	ev				×	. *	🗱 Sig	ın in t	to PBG	5			×	-	F							-		0
\leftarrow	С	ີ h	ttps://au	uth.pk	bg.pilo	tv0.u	iat.r	nari	anne	.thir	k-big.	.blue/	/realr	ms/PB	BG/log	jin-ac	tions	s/requ	uired	l-actio	on?e	xecut	i a	Э <i>ф</i>	Aø	C] Z	3	¢	띠	£≡	Ē	~	Cie Cie	
							re ac th	gis tio e u	ratio ns, b sers	on, o ase of [conne d on t DL3S a	ectior the le and k	, egiti keep	nd aut imate p trac	nque o thenti e inter ck of t olorato	icatio rest o heir	on of of the actic	f use e Ba ons c	rs ai nk d on Di	nd ke le Fra	eepi ance	ng tr e to io	ack o lentif	of us fy pe	ers' ersoi										
							ac	ces	s, th	e in	terna	al con	ntrol	l and	the d audit he inf	dep	bartm	nents	s and	d the	e leg	al de	0		0										
							ar	nd t	he ri	ght	to de	fine	dire	ective	acces s con with th	cern	ing t	he fa	ate c	of you	ur d														
					1	2			-						n the (ut@ba					otect	tion	Offic	er's d	cont	act										
					L.	v					edge Ie Bar				ead ti nce	he ir	nforr	mati	on c	on th	ne u	se of	' my j	per	sona	al									
																	OK																		

f) Finally, login using the credentials set up earlier

	Ô		Marianne -	Add new u	iser	× 🗾	MailDev			×	🕅 Sign	in to PBG		×	+						-	đ
\leftarrow	С	🗇 htt	tps://auth.	pbg.pilotv	/0.uat.ma	rianne.thin	k-big.blue/	/realms/	PBG/proto	ocol/op	enid-co	nnect/autł	n?client_id	=dl3	аљ	A	☆	G	£≡	Ē	~	
		QUE DE FR. UROSYSTÈM		D	L3S			st	Monetary rategy Financial stabilit			Economic services										
						Emai											7					
						sir	ngleuser2@p	pbg.eu						(0							
							Enregistr	rer dans	s 1Passwo	ord		63			۲							
										Log	in											

The creation of user through DL3S UI only authorizes the granting of "regular user", for a more specific creation of user, one needs to use Keycloack (see 6.2)

3.5.2 Adding an external User

To fully onboard an external participant of an external network, it is needed to create a user for him. **DL3S Operator**, **DCW manager** and **DCW custodian** can perform this operation for any external participant added to a network (see 3.3.3).

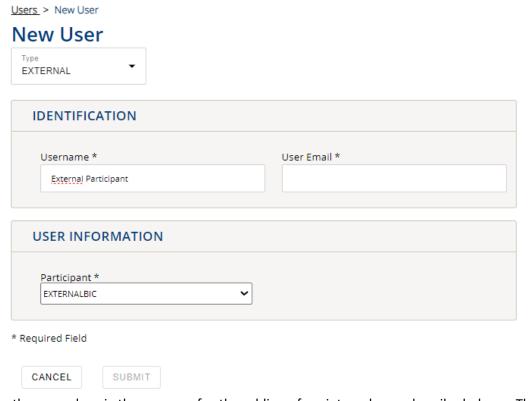
Is is to be noted that the user has to be created by the DL3S participant that added the external participant.

On the user *administration* tab, one has to select the external participant type.



BANQUE DE FRANCE EUROSYSTÈME	DL3S (A) Final States	Economic	Calendar date 05-13-2024 09:04:05 Business date 04-13-2023 Business window Opan for All Decisted Can Water Custoffan
Dashboard	Users > New User		
Dedicated Cash Wallets	New User		
T2 accounts	DL38		
CBDC Operations	EXTERNAL 🗸		
ក្តី Global	Username * User Email *		
🖞 External network			
4 eyes pending validation	USER INFORMATION		
윤, User administration	Participant *		
Parameters	* Required Field		
	CANCEL SUBMIT		

Then, it is needed to select the participant for which we are creating a user, to fill in the username and the user email.



Then the procedure is the same as for the adding of an internal user described above. The external participant will receive an email on the user email entered to specify a password.

D-B DL3S - Banque de France dl3s@banque-france.fr	Date: 13-05-2024 09:48:37
Objet: Update Your Account	
Your administrator has just requested that you update your PBS account by performing action(s): Verify Email, Update Password. Click on the link below to start this process. Link to account update This link will expire within 1 day. If you are unaware that your administrator has requested this, just ignore this message changed.	

By clicking on the link, the user is able to activate its account.



New Password		
		۲
Confirm password		
	©	۲
More than 12 characters		
An upper case letter		
A lower case letter		
A special character		
A digit		
Sign out from other devices		

After entering its first name and its last name, the participant needs to approve the GDPR notice. After this step, the external participant is able to send a message to DL3S.

It should be noted that the creation of this user allows the external participant to send messages to DL3S. However, this external participant does not have access to the DL3S UI. If he tries to connect to DL3S, he will only see a blank page.

BANQUE DE FRANCE EUROSYSTEME	Monetary second Financial Financial Financial	

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.

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

	Operator	NCE	3	Other pa	rticipants	Marke	t DLTs
Liquidity Only	Ŷ	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

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 💁		EconomB	alendar date 05-1 usiness date 05-02 usiness window O	2-2024 Dedica Dedica	e user @ CBL ted Cash Wallet Owner ted Cash Wallet Manage
⑦ Dashboard	T2 Accounts					
Dedicated Cash Wallets	T2 Accou	nts - manag	ed		Create a T2 Account	Inactive
T2 accounts	Create a T2 Account	🗢 Country Code	Valid From	Valid To	Links	Add links
GBDC Operations	Owned	LL	01-01-2022	1	PBBILLXXDLT	
<u>ກິ</u> Global	Managed	LL	01-01-2022	1	PBEILLXXDLT	i
ាំ External network	National supervised					
⑦ Reporting						
BANQUE DE FRANCE Eurosystème	DL3S 💁	Moneta strategy Finan	EconomiBu services	endar date 05-15- siness date 05-02- siness window Op	2024 Dedicate Dedicate	ser @ CBL d Cash Wallet Owner d Cash Wallet Manager
🕐 Dashboard	T2 Accounts					
Dedicated Cash Wallets	T2 Accour	nts - manage	ed		Create a T2 Account	Inactive
T2 accounts	➡ T2 Account Reference	🗢 Country Code	Valid From	Valid To	Links	Add links
GBDC Operations	LLT2PBB001	LL	01-01-2022	1	PBBILLXXDLT	1
້ຳ Global	LLT2PBE001	LL	01-01-2022		PBEILLXXDLT	

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

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Honetary statisty Financial statisty	Calendar date 05-15-2024 16:44:20 Scorom Business date 05-02-2024 Business window Open for All +2 Business window Open for All
🕐 Dashboard	T2 Accounts > New T2 Account	
Dedicated Cash Wallets	New T2 Account	
	PERIMETER	5/8/2024 🖬 Valid To
T2 accounts		
B CBDC Operations	T2 Account reference *	NCB *
B concoperations	LLT2PBB003	CBL
<u>ពំ</u> Global		
n External network	CANCEL SUBMIT	

• After you click on the *Submit* button, you will see the *T2 Account* waiting for approval in the *4 eyes pending validation / T2 Account*



	BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	strate	EconomBu services	lendar date 05-15-2 siness date 05-02-2 siness window Ope	Dedi	leuser @ CBL cated Cash Wallet Owner cated Cash Wallet Manage	er ≗x		
Ø	Dashboard	T2 Accounts - 4 Eyes	Process							
Ó	Dedicated Cash Wallets	T2 Accoun	T2 Accounts - 4 Eyes Process Managed National supervised							
Ó	T2 accounts			Managoa						
₽	CBDC Operations	T2 Account Reference	🗢 Status	🗢 Country Code	Links	Valid From	Valid To			
ñ	Global	LLT2PBB003	waiting for approval	LL	N/A	05-08-2024				
ñ	External network	LLT2PBE003	waiting for approval	LL	N/A	04-16-2023				
Ø	Reporting						•			
₽	4 eyes pending validation	Dedicated Cash Wallets								
න	User administration	CBDC Operations								
Ø	Parameters	T2 Accounts								

- You need to connect with the single user you didn't use to create the operation
- Go to *4 eyes process / T2 Account* and click on the *T2 Account Reference* just created with the previous singleuser

	BANQUE DE FRANCE Eurosystème	DL3S 🗖		Moneta strategy Finan sta	Econom Bus	endar date 05-15-20 siness date 05-02-20 siness window Open	24 Dedic Dedic	euser2 @ CBL ated Cash Wallet Owner ated Cash Wallet Manager	r 🆧	
Ø	Dashboard	T2 Acco	ounts - 4 Eyes	Process						
Ō	Dedicated Cash Wallets	T2 /	T2 Accounts - 4 Eyes Process							
Ó	T2 accounts				Managed Nat	ional supervised				
₽	CBDC Operations		Account ference	🗢 Status	🗢 Country Code	Links	Valid From	Valid To		
ñ	Global	LLT	C2PBB003	waiting for approval	LL	N/A	05-08-2024			
ñ	External network	LLT	T2PBE003	waiting for approval	LL	N/A	04-16-2023			
Ø	Reporting	•						e e		
8	4 eyes pending validation	Dedicated C Wallets	Cash							
ର୍ଶ	User administration	CBDC Opera	ations							
٥	Parameters	T2 Accounts	5							

• Validate the T2 Account by clicking on the **Approve** button

UE DE FRANCE UROSYSTÈME						
BANQUE DE FRANCE Eurosystème		Econom services	Calendar date 05-15-202 Business date 05-02-202 Business window Open	4	singleuser2 Dedicated Casl Dedicated Casl +2	@ CBL h Wallet Owner h Wallet Manager 2
🕐 Dashboard	<u>T2 Accounts - 4 Eyes Process</u> > LLT2PBB0	03				
Dedicated Cash Wallets	T2 Accounts - 4 Eyes	Process				
🔂 T2 accounts	PERIMETER		5/8/2024		Valid To	
BCBDC Operations	T2 Account reference * LLT2PBB003	NCB *	~			
n Global	* Required Field					
<u>ຶ</u> n External network	BACK TO BE REVIEWED	APPROVE				

- The newly T2 Account 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.
- Click on the pencil in the add links column.

BANQUE DE FRANCE	DL3S	QA		Monetary strategy Financial statemy	Economic sendere	Calendar date 05-11 Business date 05-02 Business window O	-2024	singleuser2 @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage +2
🕐 Dashboard	<u>T2 A</u>	Accounts > Inact	ive T2 Accounts					
	In	active T	2 Accounts -	- managed				
Wallets		T2 Account Reference	Country Code	Valid From	Valid To	Links	Add links	Last update
T2 accounts		LLT2PBB002	LL	05-15-2024 🧪	1		1	05-15-2024
GBDC Operations								16:39:38
n Global		LLT2PBB003	LL	05-08-2024 🎤	1			05-15-2024 16:49:52

- 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 Economic Financial stability	Calendar date 05-15-2024 17:10:26 Business date 05-02-2024 Business window Open for All	singleuser2 @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2	2x
Ø	Dashboard	<u>T2 Accounts</u> > Add links to T2 Account				
Ó	Dedicated Cash Wallets	Add links to T2 Accour	nt			
G	T2 accounts	PERIMETER				
₽	CBDC Operations	T2 Account reference *	NCB *	~		
ñ	Global					
ñ	External network	Links			+	
Ø	Reporting	CANCEL				

- Select the Entity
- Click on the Submit button

UE DE FRANCE urosystème					
BANQUE DE FRANCE EUROSYSTÊME	DL3S (A	Monetary strategy Financial stability	Calendar date 05-15-2024 17:11:28 Business date 05-02-2024 Business window Open for All	singleuser2 @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2	2×
② Dashboard	T2 Accounts > Add links to T2 Account				
Dedicated Cash Wallets	Add links to T2 Accourt	nt			
T2 accounts	PERIMETER				
BCBDC Operations	T2 Account reference * LLT2PBB003	NCB *	~		
<u>n</u> Global					
n External network	Links			+	
Reporting	Entity PBB	• X			
4 eyes pending validation					
路 User administration	CANCEL SUBMIT				

• After you click on the *Submit* button, you will see the *T2 Account Link* waiting for approval in the *4* eyes pending validation / *T2 Account*

	BANQUE DE FRANCE Eurosystème	DL3S 💁	strat	Economi B services	alendar date 05-15- usiness date 05-02-2 usiness window Op	2024	singleuser2 @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (+2)	2
Ø	Dashboard	T2 Accounts - 4 Eyes	Process					
Ó	Dedicated Cash Wallets	T2 Accour	its - 4 Eyes	Process				
Ó	T2 accounts			Managed Na	tional supervised			
8	CBDC Operations	← T2 Account Reference	🗢 Status	🗢 Country Code	Links	Valid From	Valid To	
ñ	Global	LLT2PBB003	waiting for approval	LL	PBBILLXXDLT	05-08-2024		
ñ	External network	LLT2PBE003	waiting for approval	LL	PBBILLXXDLT	04-16-2023		
Ø	Reporting	4						
₽	4 eyes pending validation	Dedicated Cash Wallets						
8	User administration	CBDC Operations						
0	Parameters	T2 Accounts						

- You need to connect with the single user you didn't use to create the operation
- Go to 4 eyes process / T2 Account and click on the T2 Account Links just created with the previous singleuser



	BANQUE DE FRANCE Eurosystème	DL3S QA	stra	Economi B Services	alendar date 05-15- usiness date 05-02- usiness window Op	2024	singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2	2				
Ø	Dashboard	T2 Accounts - 4 Eyes	Process									
Ó	Dedicated Cash Wallets	T2 Accour	T2 Accounts - 4 Eyes Process Managed National supervised									
G	T2 accounts			Managed Na								
₽	CBDC Operations	➡ T2 Account Reference	🗢 Status	🗢 Country Code	Links	Valid From	Valid To					
ñ	Global	LLT2PBB003	waiting for approval	LL	PBBILLXXDLT	05-08-2024						
ñ	External network	LLT2PBE003	waiting for approval	LL	PBBILLXXDLT	04-16-2023						
Ø	Reporting	•										
₽	4 eyes pending validation	Dedicated Cash Wallets										
න	User administration	CBDC Operations										
0	Parameters	T2 Accounts										

• Validate the T2 Account by clicking on the **Approve** button

	BANQUE DE FRANCE EUROSYSTÈME	DL3S 🐢	Monet strategy Finai st	Economie	Calendar date 05-15-2024 1 Business date 05-02-2024 Business window Open for A	singleuser @ Dedicated Cash Dedicated Cash +2	CBL Wallet Owner Wallet Manager	Ô
Ø	Dashboard	T2 Accounts - 4 Eyes Process	> LLT2PBB003	3				
Ó	Dedicated Cash Wallets	T2 Accounts -	4 Eyes F	Process				
Ó	T2 accounts	PERIMETER			5/8/2024	alid To		
a	CBDC Operations	T2 Account reference *		NCB *	~			
ñ	Global							
ñ	External network	LINKS						
Ø	Reporting	Entity *	~					
H	4 eyes pending validation	* Required Field						
8	User administration	BACK TO BE RE	VIEWED	APPROVE				

• Go to the T2 Accounts / Managed tab and click on the Inactive button

BANQUE DE FRANCE Eurosystème	DL3S 😱		Monetary strategy Financial stabile	Economic	Calendar date 05-15- Business date 05-02- Business window Op	2024	singleuser @ CBL Dedicated Cash Wallet Owne Dedicated Cash Wallet Mana (+2)		
🕐 Dashboard	T2 Accounts	unts							
Dedicated Cash Wallets	T2 Accou	nts -	managed			Create a T2 Ad	ccount		
T2 accounts	Create a T2 Account	erence	🗢 Country Code	Valid From	Valid To	Links	Add links		
GBDC Operations	Owned		LL	01-01-2022	1	PBBILLXXDLT	1		
			LL	01-01-2022	1	PBEILLXXDLT	1		
<u>ກິ</u> Global	Managed		LL	04-16-2023	1		1		
<u>ព</u> ំ External network	National supervised				-				
⑦ Reporting									



• The newly created T2 Account with its Link appears in the Inactive T2 accounts list

BANQUE DE FRANCE EUROSYSTEME	DL	DL3S 😱		Monetary texter Resolution Economic Econom			3 singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2		
 Dashboard Dedicated Cash 		T2 Accounts > Inact	ive T2 Accounts 2 Accounts	- managed					
Wallets			🗢 Country Code	Valid From	Valid To	Links	Add links	Last update	
T2 accounts		LLT2PBB002	LL	05-15-2024 🧪	1		1	05-15-2024 16:39:38	
CBDC Operations		LLT2PBB003	LL	05-08-2024 🧨	/	PBBILLXXDLT	1	05-15-2024 16:49:52	
n Global									

• Once the Valid from date is reached, the newly created T2 account become valid and appears on *T2 accounts – managed* tab.

BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	Monetary strategy Financial stabili	Economic	Calendar date 05-16 Business date 05-10- Business window Op	-2024	singleuser @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manag (+2)
🕐 Dashboard	T2 Accounts					
Dedicated Cash Wallets	T2 Accounts -	managed			Create a T2 A	ccount
T2 accounts	T2 Account Reference	🗢 Country Code	Valid From	Valid To	Links	Add links
CBDC Operations	LLT2PBB001	LL	01-01-2022	1	PBBILLXXDLT	i
	LLT2PBB003	LL	05-08-2024	1	PBBILLXXDLT	1
n Global	LLT2PBE001	LL	01-01-2022	1	PBEILLXXDLT	1
ក្នំ External network	LLT2PBE003	LL	04-16-2023			1
⑦ Reporting				-		

- 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

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



	BANQUE DE FRANCE Eurosystème	DL3S 😱	Monetary solategy Financial stability	Economic services	Busines	r date 05-15-2024 18:21:3 s date 05-02-2024 s window Open for All	4 singleuser @ 0 Dedicated Cash Dedicated Cash +2	Wallet Owner
Ø	Dashboard	Dedicated Cash Wa	allets					
Ó	Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Wallets - mar	naged		Create a Dedicated	Cash wallet	nactive
Ó	T2 accounts	Owned		Standard	Issuance			
₽	CBDC Operations	Managed				Filter		Q
ñ	Global	National supervised			ount nce	🗢 Wallet Alias	🗢 Owner BIC	♦ Owner Name
ñ	External network	VJvYBpJE6SAm	vab8Foo1ptosc/i8nIXOtNu5Pzv6Xoo=	LLT2PE	B001	CUSTODIAN_WALLET	CBLXLLXXDLT	CBL
		45y+gcUyvHO	yhi+r3n+OY66egecIqCJznF9pc12V/IM=	LLT2PE	3B001	PBB_WALLET_001	PBBILLXXDLT	PBB
Ø	Reporting	GZmz6Hlw2cL	xySlgxczX/wr5kRl9kw32Q4aWz9XosRU=	LLT2PE	BE001	PBE_WALLET_001	PBEILLXXDLT	PBE
₽	4 eyes pending validation			_				•

- Fill in for the following fields:

	BANQUE DE FRANCE EUROSYSTÈME	DL3S 🔍	Monetary strategy Financial stability	Economic Business	date 05-15-2024 18: date 05-02-2024 window Open for All	Dedicate	ser @ CBL d Cash Wallet Owner d Cash Wallet Manager	2x
Ø	Dashboard	Dedicated Cash Wallets > New Dedicated	Cash Wallet					
Ó	Dedicated Cash Wallets	New Dedicated Cash	n Wallet					
Ó	T2 accounts	PERIMETER		5/3/2024	Ē	Valid To	Ē	
₽	CBDC Operations	Dedicated Cash Wallet Alias * PBB_WALLET_002		t Name * 3 (PBBILLXXDLT)	~			
ñ	Global							
ñ	External network	Currency *		Account reference *	~			
Ø	Reporting	Euro	, i	LIZPDDUUI	·			
₽	4 eyes pending validation							
왕	User administration	CANCEL SUBMIT						

- 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.
- Select the *Short Name* that correspond to the Entity name
- *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
- \circ $\;$ Choose a valid from date starting from which the wallet is valid
- Valid To date is not mandatory
- After you click on the *Submit* button, you will see the *Dedicated Cash Wallet* waiting for approval in the *4 eyes pending validation / Dedicated Cash Wallets*

BANQUE DE FRANCE
EUROSYSTÈME

	BANQUE DE FRANCE Eurosystème	DL3S QA	3	Monetary stategy Financial stateliny	Business date	e 05-15-2024 18:32:59 05-02-2024 dow Open for All	singleuser @ CBL Dedicated Cash Wall Dedicated Cash Wall +2	et Owner
Ø	Dashboard	Dedicated Cash Wallets -	4 Eyes Process					
6	Dedicated Cash Wallets	Dedicated C	ash Walle	ets - 4 Eyes				
G	T2 accounts			Own	eu manageu			
ð	CBDC Operations	🗢 Wallet Alias	T2 Account Reference	🗢 Status	Owner BIC	Owner Short Name	Valid From	Val
ň	Global	PBB_WALLET_002	LLT2PBB001	waiting for approval	PBBILLXXDLT	PBB	05-03-2024	
ň	External network	PBE_TEST_WALLET	LLT2PBE001	waiting for approval	PBEILLXXDLT	PBE	05-01-2024	
n	External network	ZRFZRFd	LLT2PBE001	waiting for approval	PBEILLXXDLT	PBE	01-10-2023	
\odot	Reporting							
₽	4 eyes pending validation	Dedicated Cash Wallets						F.
ස්	User administration	CBDC Operations						

- You need to connect with the single user you didn't use to create the operation
- Go to *4 eyes process / Dedicated Cash Wallets* and click on the *Wallet Alias* just created with the previous singleuser

	BANQUE DE FRANCE Eurosystème	DL3S 😱		Monetary trategy Financial stability	nic Business date	05-15-2024 18:35:52 05-02-2024 Now Open for All	singleuser2 @ CE Dedicated Cash Wall Dedicated Cash Wall +2	et Owner et Manager 🖉 🗙
Ø	Dashboard	Dedicated Cash Wallets	- 4 Eyes Process					
Ó	Dedicated Cash Wallets	Dedicated (Cash Walle	ets - 4 Eyes F				
Ō	T2 accounts			Owned	Manageu			
₿	CBDC Operations	🗢 Wallet Alias	T2 Account Reference	🗢 Status	Owner BIC	Owner Short Name	Valid From	Val
ñ	Global	PBB_WALLET_002	LLT2PBB001	waiting for approval	PBBILLXXDLT	PBB	05-03-2024	
ñ	External network	PBE_TEST_WALLET	LLT2PBE001	waiting for approval	PBEILLXXDLT	PBE	05-01-2024	
		ZRFZRFd	LLT2PBE001	waiting for approval	PBEILLXXDLT	PBE	01-10-2023	
Ø	Reporting							•
₽	4 eyes pending validation	Dedicated Cash Wallets						F
23	User administration	CBDC Operations						

• Validate the Dedicated Cash Wallet by clicking on the **Approve** button



	BANQUE DE FRANCE Eurosystème	DL3S QA	Monetary strategy Financial stability	Calendar date 05-15-2024 18:3 Business date 05-02-2024 Business window Open for All	9:33 singleuser2 @ CBL Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2
Ø	Dashboard	Dedicated Cash - 4 Eyes Process > PBB_W	VALLET_002		
Ó	Dedicated Cash Wallets	Dedicated Cash - 4 E	yes Process		
G	T2 accounts	PERIMETER		5/3/2024	Valid To
a B	CBDC Operations	Dedicated Cash Wallet Alias *	Client Entity ID *	Currency *	
		PBB_WALLET_002	PBBILLXXDLT	Euro	<u> </u>
ñ	Global	T2 Account reference *			
ñ	External network	LLT2PBB001	~		
Ø	Reporting	* Required Field			
₽	4 eyes pending validation	BACK TO BE REVIEWED	APPROVE		

• Go to the *Dedicated Cash Wallets / Managed* tab and click on the *Inactive* button

	BANQUE DE FRANCE EUROSYSTEME	DL3S 😱	Monetary strategy Financial stability	Economic Bu	lendar date 05-15-2024 siness date 05-02-2024 siness window Open fo	Dedicated Cas	@ CBL h Wallet Owner h Wallet Manager
Ø	Dashboard	Dedicated Cash Wallets					
6	Dedicated Cash Wallets	Dedicated Ca	sh Wallets - man	aged	Create a Dec	licated Cash wallet	Inactive
6	T2 accounts		:	Standard Issue	ance		
9	CBDC Operations				Filter		٩
ň	Global	Wallet ID		T2 Account Reference	🗢 Wallet Alias	🗢 Owner BIC	♦ Owne Name
ñ	External network	VJvYBpJE6SAmvab8Foo	1ptosc/i8nIXOtNu5Pzv6Xoo=	LLT2PBB001	CUSTODIAN_W	ALLET CBLXLLXXDLT	CBL
		45y+gcUyvHOyhi+r3n+	OY66egecIqCJznF9pc12V/IM=	LLT2PBB001	PBB_WALLET_0	01 PBBILLXXDLT	PBB
	Reporting	GZmz6Hlw2cLxySlgxcz)	K/wr5kRI9kw32Q4aWz9XosRU=	LLT2PBE001	PBE_WALLET_0	01 PBEILLXXDLT	PBE
3							

• The newly created *Dedicated Cash Wallet* appears in the *Inactive Dedicated Cash Wallets* list. 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 🐢	Monetary strategy Financial stationy	Economic services	Calendar date 05-15-2024 1 Business date 05-02-2024 Business window Open for	Dedicated Dedicated	er2 @ CBL Cash Wallet Owner Cash Wallet Manager	осх
Ø	Dashboard	Dedicated Cash Wallets > Inactive	Dedicated Cash Wallets					
G	Dedicated Cash Wallets	Inactive Dedicate	ed Cash Wall		Ianaged			
G	T2 accounts			Standard	Issuance			
đ	CBDC Operations	Wallet ID		T2 Accourse Reference	nt 🗢 Wallet Alias	🗢 Owner BIC	🗢 Owner Nan	
ñ	Global	qP4y9IJI8sAfRjqSxKnWQ8/rNU	Jrq2E47CcUgvaE73X0=	LLT2PBB0	01 PBB_WALLET_002	PBBILLXXDLT	PBB	
ñ	External network						•	



	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA		tary Economic ancial mability	Business dat	te 05-16-2024 10:00:30 te 05-10-2024 ndow Open for All	singleuser @ C Dedicated Cash V Dedicated Cash V +2	Vallet Owner
Ø	Dashboard	Dedicated Cash Wal	lets					
G	Dedicated Cash Wallets	Dedicated	d Cash Wallets	- manageo	ł	Create a Dedicated C	ash wallet	nactive
Ó	T2 accounts			Standard	Issuance			
₽	CBDC Operations					Filter		Q
ñ	Global		⇔ Wallet Alias		Owner Shor Name	t 🗢 Currency	🗢 Available	\$ C
ñ	External network	LLT2PBB001	CUSTODIAN_WALLET	CBLXLLXXDLT	CBL	EUR	0	L
~		LLT2PBB001	PBB_WALLET_001	PBBILLXXDLT	PBB	EUR	10015	L
0	Reporting	LLT2PBB001	PBB_WALLET_002	PBBILLXXDLT	PBB	EUR	0	L
₽	4 eyes pending validation	LLT2PBE001	PBE_WALLET_001	PBEILLXXDLT	PBE	EUR	10 000	L
	User 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.
- 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>)
- Go to the Dedicated Cash Wallets / Managed tab

	BANQUE DE FRANCE Eurosystème	DL3S 😱	strat	Financial stability	nic Business date		33 singleuser @ Pl Dedicated Cash W Dedicated Cash W	BS allet Owner or of the second secon
Ø	Dashboard	Dedicated Cash Wall	ets					
G	Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Wallet	s - manage	ed	Create a Dedicated	I Cash wallet	nactive
Ó	T2 accounts	Owned				Filter		Q
₽	CBDC Operations	Managed	🗢 Wallet Alias	🗢 Manager BIC	Manager Short Name	Currency	Available	🗢 Cou
و		11121 05001	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	FR
п	Global	FRT2PBS001	PBS_CLI2_WALLET	PBSOFRXXDLT	PBS	EUR	0	FR
ñ	External network	4						•



• Click on the Create a Dedicated Cash Wallet button

	BANQUE DE FRANCE Eurosystème	DL3S 🐢	strat	Financial stability	Business date	05-15-2024 18:54:0 05-02-2024 ow Open for All	9 singleuser @ Pl Dedicated Cash W Dedicated Cash W	BS allet Owner O allet Custodian
Ø	Dashboard	Dedicated Cash Walle	ets					
G	Dedicated Cash Wallets	Dedicated	Cash Wallet	s - manage	ed	Create a Dedicated	Cash wallet	nactive
G	T2 accounts					Filter		Q
₽	CBDC Operations	T2 Account Reference	🗢 Wallet Alias	🗢 Manager BIC	♦ Manager Short Name	Currency	🗢 Available	🗢 Cou
9	Global	FRT2PBS001	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	FR
ш	Giobal	FRT2PBS001	PBS_CLI2_WALLET	PBSOFRXXDLT	PBS	EUR	0	FR
ñ	External network	4						•

- 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
 - 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 Financial stability	Calendar date (Business date (Business windor		singleuser @ Dedicated Cash Dedicated Cash	PBS Wallet Owner Wallet Custodian	2
Ø	Dashboard	Dedicated Cash Wallets > New Dedicated	Cash Wallet					
G	Dedicated Cash Wallets	New Dedicated Cash	Wallet					
G	T2 accounts	PERIMETER		5/3/2024		/alid To	Ē	
6	CBDC Operations	Dedicated Cash Wallet Alias * PBS_CLI1_WALLET002		Short Name (custody) *	01) 🗸			
ñ	Global							
ñ	External network	Currency *	T2 A	ccount reference *				
₽	4 eyes pending validation	Euro	► FR	'2PBS001	ř			
8	User administration							
Ø	Parameters	CANCEL SUBMIT						

• After you click on the *Submit* button, you will see the *Dedicated Cash Wallet* waiting for approval in the *4 eyes pending validation / Dedicated Cash Wallets*

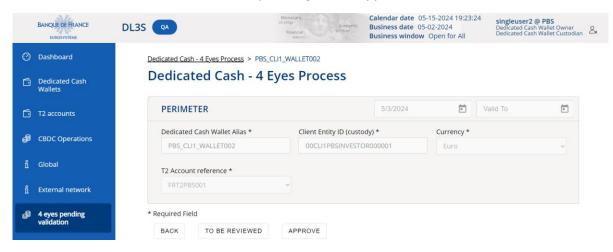


	BANQUE DE FRANCE Eurosystème	DL3S QA			Calendar date 05-1 Business date 05-0 Business window 0	2-2024	singleuser @ PBS Dedicated Cash Wallet (Dedicated Cash Wallet (Owner Okanowski Owner
Ø	Dashboard	Dedicated Cash Wallets - 4	Eyes Process					
G	Dedicated Cash Wallets	Dedicated Ca	sh Wallets		naged			
Ó	T2 accounts			IVICI	lageu			
₿	CBDC Operations	Wallet Alias	♣ T2 Account Reference	🗢 Status	Manager BIC	Valid From	Valid To	÷
ñ	Global	PBS_CLI1_WALLET002	FRT2PBS001	waiting for approval	PBSOFRXXDLT	05-03-2024		
ñ	External network							•
₽	4 eyes pending validation	Dedicated Cash Wallets						

- You need to connect with the single user you didn't use to create the operation
- Go to *4 eyes process / Dedicated Cash Wallets* and click on the *Wallet Alias* just created with the previous single user

	BANQUE DE FRANCE Eurosystème	DL3S 🔍		Economic stability	Calendar date 05-1 Business date 05-0 Business window 0	2-2024	singleuser2 @ PBS Dedicated Cash Walle Dedicated Cash Walle	t Owner &
Ø	Dashboard	Dedicated Cash Wallets - 4 E	yes Process					
G	Dedicated Cash Wallets	Dedicated Ca	sh Wallets		OCESS			
G	T2 accounts				14904			
₽	CBDC Operations	Wallet Alias		🗢 Status	Manager BIC	Valid From	Valid To	¢
ñ	Global	PBS_CLI1_WALLET002	FRT2PBS001	waiting for approval	PBSOFRXXDLT	05-03-2024		
ñ	External network							•
₽	4 eyes pending validation	Dedicated Cash Wallets						

• Validate the Dedicated Cash Wallet by clicking on the Approve button



• Go to the Dedicated Cash Wallets / Managed tab and click on the Inactive button

	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Monetary strategy Financial sobiety	Business da	ate 05-15-2024 19:28:47 ate 05-02-2024 ndow Open for All	singleuser2 @ PB Dedicated Cash Wall Dedicated Cash Wall	S et Owner et Custodia
Ø	Dashboard	Dedicated Cash Wa	illets				
6	Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Wallets - manag	ed	Create a Dedicated Ca	ash wallet Ina	ictive
6	T2 accounts	Owned			Filter		Q
₽	CBDC Operations	Managed			🗢 Wallet Alias	🗢 Manager BIC	¢ Ma Nai
		crosinegens	gMBbzHPymEQfWsmyS3pscm5Fpw0UGes=	FRT2PBS001	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS
ñ	Global	y050AQWdGK	J5gSLZYfmhdf/tFLvF5KEa28boVOKm3Xw=	FRT2PBS001	PBS_CLI2_WALLET	PBSOFRXXDLT	PBS
ñ	External network						

• The newly created Dedicated Cash Wallet appears in the Inactive Dedicated Cash Wallets list.

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Moneta strategy Finan str	Economic	Calendar date 05-1 Business date 05-0 Business window 0	2-2024	singleuser2 @ PBS Dedicated Cash Wallet Owne Dedicated Cash Wallet Custo
⑦ Dashboard	Dedicated Cash Wa	llets > Inactive Dedicated Cas	h Wallets			
 Dedicated Cash Wallets 	Inactive [Dedicated Cash	Wallets - r	managed		
T2 accounts			Standard	Issuance		
		🗢 Wallet Alias	Manager BIC	Anager Name	Country Code	Valid From
GBDC Operations	Reference					

• Once the Valid from date is reached, the dedicated cash wallet becomes valid and appears on Dedicated Cash Wallets – managed tab.

	BANQUE DE FRANCE EUROSYSTEME	DL3S QA				Calendar date 05- Business date 05- Business window	10-2024	singleuser2 @ PE Dedicated Cash Wall Dedicated Cash Wall	et Owner et Custodia
Ø	Dashboard	Dedicat	ted Cash Walle	ets					
Ó	Dedicated Cash Wallets	Dec	licated	Cash Wallets	- managed	Cre	ate a Dedicated Ca	ash wallet Ina	ictive
6	T2 accounts						Filter		Q
₽	CBDC Operations	¢ T2 Ref	Account ference	Wallet Alias	Manager BIC	Manager Short Name		🗢 Available	÷
ñ	Global	FR	T2PBS001	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	
ш	Global	FR	T2PBS001	PBS_CLI1_WALLET002	2 PBSOFRXXDLT	PBS	EUR	0	
ñ	External network	FR	T2PBS001	PBS_CLI2_WALLET	PBSOFRXXDLT	PBS	EUR	0	
₽	4 eyes pending validation								•

- 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.

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• 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.

BANQUE DE FRANCE Eurosystème	DL3S QA	Moneta strategy Finar st	Economic	Calendar date Business date Business windo		pbs-cli1 @ PBS-CLI1 @ P Dedicated Cash Wallet User
Dashboard	Dedicated Cash Wallets >	Inactive Dedicated Cas	h Wallets			
Dedicated Cash Wallets	Inactive Dedi	cated Cash				
CBDC Operations			Standard	Issuance		
Global	🗢 Wallet Alias	Anager BIC	Anager Name	Country Code	Valid From	Valid To
	PBS_CLI1_WALLET002	PBSOFRXXDLT	PBS	FR	05-03-2024	

Once the Valid from date is reached, the dedicated cash wallet appears on the Dedicated Cash Walletsused tab.

BANQUE DE FRANCE EUROSYSTÊME	DL3S 😱			Business da	ate 05-16-2024 10:15:20 ate 05-10-2024 indow Open for All	pbs-cli1 @ PBS-0 Dedicated Cash Wa	
🖉 Dashboard	Dedicated Cash Wallets						
Dedicated Cash Wallets	Dedicated Ca	sh Wallets	- used			Inactiv	/e
CBDC Operations					Filter		Q
n Global	🗢 Wallet Alias	Anager BIC	Manager Short Name	♦ Currency	Available	🗢 Country Code	
	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	FR	:
	PBS CLI1 WALLET002	PBSOFRXXDLT	PBS	EUR	0	FR	12

4.1.3 Dedicated Cash Wallets view

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

- 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.
- 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.
- 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.



	BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	strin	Financial statisty	Business dat	te 05-15-2024 19:43: te 05-02-2024 adow Open for All	Dedicated Cash V	DF Vallet Owner Vallet Manager
Ø	Dashboard	Dedicated	Cash Wallet	s - manage	ed	Create a Dedicated C	Cash wallet Ina	ctive
G	Dedicated Cash Wallets	Create a Dedicated Cash Wallet		Standar	rd Issuance			
G	T2 accounts	Owned				Filter		Q
₽	CBDC Operations	Managed	🗢 Wallet Alias	🗢 Owner BIC	♦ Owner Short Name		Available	¢ Co
ñ	Global	National supervised	PBD_WALLET_001	PBDEDXXXDLT	PBD	EUR	75	D)
ñ	External network	DXT2PBD003	PBD_WALLET_003	PBDEDXXXDLT	PBD	EUR	0	D>
0		DXT2PBD001	PBD_WALLET_XXX	PBDEDXXXDLT	PBD	EUR	0	D>
Ø	Reporting	FRT2PBG001	PBG_WALLET_001	PBGSGGXXDLT	PBG	EUR	10415	FR
₽	4 eyes pending validation	NNT2PBR001	PBR_WALLET_001	PBRBNNXXDLT	PBR	EUR	0	NI
å	User administration	FRT2PBS001	PBS_WALLET_001	PBSOFRXXDLT	PBS	EUR	19565	FR
	BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	strate	netary 87 Econon inancial services	Business of	date 05-15-2024 19:- date 05-02-2024 window Open for All	pbs-cli1 @ P	BS-CLI1 @ PBS h Wallet User
Ø	Dashboard	Dedicated Cash Walle	25					
G	Dedicated Cash Wallets	Dedicated	Cash Wallet	s - used			In	active
₽	CBDC Operations					Filter		Q
ñ	Global	🗢 Wallet Alias	Anager BIC	Manager Short Name	Currency	Available	Country Code	Toke
~		PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	FR	Seel
0	Parameters	4				-		•

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.

BANQUE DE FRANCE Eurosystème	DL3S QA	stra	Financial stability	mic Business date	05-15-2024 19:47:4 05-02-2024 low Open for All	46 singleuser @ F Dedicated Cash V Dedicated Cash V	Vallet Owner C
🕐 Dashboard	Dedicated Cash Wa	llets					
Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Waller	ts - owned		Create a Dedicated	d Cash wallet	Inactive
T2 accounts	Owned				Filter		Q
GBDC Operations	Managed	🗢 Wallet Alias	Manager BIC	♦ Manager Short Name	Currency	🗢 Available	🗢 Cou
ê Clabal	TRIZI 20001	PBG_WALLET_001	BDFEFR2TXXX	BDF	EUR	10415	FR
<u>n</u> Global	4				_		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

BDF Service description external / v1.6



- *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.

PBG		Cash postings histor	N.			2
Cash Wallet	PBG_WALLET_001	cush postings histor		e range:	Start date – End da	te 🗖
Owner BIC	PBGSGGXXDLT		Dat	e range.		
Currency	EUR	Instruction ID	Operation Type	Amount	Date/Time	Counterpart ID
T2 Account Country Code	FRT2PBG001 FR	TRANSFER_PBS_PBG	TRANSFER	+150	05-15-2024 15:53:48	
Manager BIC	BDFEFR2TXXX	PBG_Redemption	REDEMPTION	-5	05-14-2024 19:41:28	
		DCWOwner_Transfer	TRANSFER	-15	05-14-2024 19:30:23	
		Transfer_Test	TRANSFER	+30	05-14-2024 18:06:14	
		PBS_Transfer	TRANSFER	+55	05-14-2024 17:50:36	
		•	Items per page:	5 🗸	1 – 5 of 9	< > >

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 Eurosystème	DL3S QA	M	Financial stability	Business da	ate 05-15-2024 19:49:30 ate 05-02-2024 indow Open for All	Dedicated C	r @ BDF ash Wallet Ownei ash Wallet Manaş
Ø	Dashboard	Dedicated	Cash Wallet	ts - manag	ed	Create a Dedicated Ca	sh wallet	Inactive
	Dedicated Cash Wallets	Create a Dedicated Cash Wallet		Standa				
Ó	T2 accounts	Owned				Filter		Q
đ	CBDC Operations	Managed	🗢 Wallet Alias	♦ Owner BIC	♦ Owner Short Name	⇔ Currency	Available	\$ Cc
ñ	Global	National supervised	PBD_WALLET_001	PBDEDXXXDLT	PBD	EUR	75	D)
ñ	External network	DX12PBD003	PBD_WALLET_003	PBDEDXXXDLT	PBD	EUR	0	D
-		DXT2PBD001	PBD_WALLET_XXX	PBDEDXXXDLT	PBD	EUR	0	D>
0	Reporting	FRT2PBG001	PBG_WALLET_001	PBGSGGXXDLT	PBG	EUR	10415	FF
	4 eyes pending validation	NNT2PBR001	PBR_WALLET_001	PBRBNNXXDLT	PBR	EUR	0	NI
		FRT2PBS001	PBS_WALLET_001	PBSOFRXXDLT	PBS	EUR	19565	FF
8	User administration							

- 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.

Dashboar PBG X Dedicatew Wallets Cash Wallet PBG_WALLET_001 Owner BIC PBGSGGXXDLT Currency EUR T2 account FRT2PBG001 TRANSFER PBS PBG TRANSFER +150 05-15-2024		EUROSYS	NCE DL3S	QA	Monetary strategy		dar date(ess date(05-15-2024 19:50:24 05-02-2024	singleuser @ B Dedicated Cash W Dedicated Cash W
Walles Owner BIC PBGSGGXXDLT Currency EUR Instruction ID Operation Type Amount Date/Time Counterpart ID 1 Cabol Country Code FR Instruction ID Operation Type Amount Date/Time Counterpart ID 1 Global Country Code FR PBG_Redemption REDEMPTION -5 05-14-2024 PBSOFRXXDL 1 External r External r Country Code FR PBG_Redemption REDEMPTION -5 05-14-2024 19:30:23 Instruction 19:30:23 Instru	🕐 Das	shboar dicate c		PBG_WALLET_001	Cash postings histor		e range	Start date – End da	
CBDC Op Country Code FR TRANSFER_PBS_PBG TRANSFER +150 05-15-2024 PBSOFRXXDL Manager BIC BDFEFRZTXXX PBG_Redemption REDEMPTION -5 05-14-2024 19:41:28 DCWOwner_Transfer TRANSFER +30 05-14-2024 19:30:23 10:41:28 Transfer_Test TRANSFER +30 05-14-2024 19:30:23 10:41:28 PBS_Transfer TRANSFER +30 05-14-2024 19:50:36 10:40:14 PBS_Transfer TRANSFER +55 05-14-2024 19:50:36 10:40:14 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36 11:50:36					Instruction ID		-		
¹ Global ¹ Manager BIC ¹ BDFEFR2TXXX ¹ DCWOwner_Transfer ¹ TRANSFER ¹ 19:41:28 ¹ External r ¹ Reporting ¹ CWOwner_Transfer ¹ TRANSFER ¹ 05:14:2024 ¹ PBSOFRXXDL ² Personal ¹ Personal ¹ PRANSFER ¹ 05:14:2024 ¹ PBSOFRXXDL ² Personal ¹ Personal ¹ PRANSFER ¹ 19:41:28	🖨 СВІ							15:53:48	PBSOFRXXDL
n External f Transfer_Test TRANSFER * Reporting PBS_Transfer PBS_Transfer TRANSFER *5 05-14-2024 18:06:14 PBSOFRXXDL		obal	Manager BIC	BDFEFR2TXXX				19:41:28 05-14-2024	
PBS_transfer TRANSFER +55 05-14-2024 PBSOFRXDL 17:50:36 4 eyes pe	_				Transfer_Test	TRANSFER	+30	05-14-2024	PBSOFRXXDL
	Ĵ 4 ey	yes pe			PBS_Transfer	TRANSFER	+55		PBSOFRXXDL

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	DL3S 🔍	strate	Econom Financial stability			D singleuser @ B Dedicated Cash W Dedicated Cash W +2	Vallet Owner
🕐 Dashboard	Dedicated Cash Wal	lets					
Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Wallet	s - nationa	l supervise	d	Ir	nactive
T2 accounts	Owned		Standar	rd Issuance			
GBDC Operations	Managed				Filter		Q
မြာ CBDC Operations nိ Global	Managed National supervised	🗢 Wallet Alias	♦ Manager BIC	Manager Short Name	Filter	Available	Q \$ Col
n Global	National	Wallet Alias PBG_CLI1_WALLET	Manager BIC PBGSGGXXDLT	 Manager Short Name PBG 		Available 10	
ñ Global	National supervised			Name	Currency		¢ Co
n Global	National supervised FR12PBG001	PBG_CLI1_WALLET	PBGSGGXXDLT	PBG	← Currency EUR	10	¢ Col
n Global n External network	National supervised FRT2PBG001 FRT2PBG001	PBG_CLI1_WALLET PBG_CLI2_WALLET	PBGSGGXXDLT PBGSGGXXDLT	Name PBG PBG	◆ Currency EUR EUR	10 0	¢ Col
ng Global	National supervised FR12PBG001 FRT2PBG001 FRT2PBS001	PBG_CLI1_WALLET PBG_CLI2_WALLET PBS_CLI1_WALLET	PBGSGGXXDLT PBGSGGXXDLT PBSOFRXXDLT	PBG PBG PBS	Currency EUR EUR EUR EUR	10 0 70	¢ Col FR FR FR



- 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 P		DL3S 🐢	Strategy Economic Bus	iness date	05-15-2024 19 05-02-2024 ow Open for A	De	ngleuser @ BD edicated Cash Wa edicated Cash Wa 2	DF allet Owner allet Manager &
Ø	Dashboar	PBG						×	
G	Dedicated Wallets	Cash Wallet	PBG_CLI1_WALLET	Cash postings history	ate range:	Start date -	- End date	ē c	tive
	T2 accour	Owner BIC Currency	PBGSGGXXDLT	Instruction ID		Operation Type	Amount	Date/Tit	
9	CBDC Op	T2 Account Country Coo	FRT2PBG001 de FR	TRANSFER_PBSCLI1_PBGCLI1_20240		TRANSFER	+10	05-10-2 17:39:2	Q
ů	Global	Manager Bl	C PBGSGGXXDLT		_	-		•	¢ C
ň	External r			Items per page:	5 🕶	1 – 1 of 1	IC C	> >1	FI
0	Reporting			Balance				10 EUR	FI
-	4 eyes pe validation								FI
ð	User admir	histration				_			+

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.

• To access the issuance creation file, select the Create a CBDC Operation subtab





• Select the issuance type so that debited parties will be automatically filled in and operation context cross-manager will be automatically selected.

PARTIES		
CBDC Operation ID *	Type * ISSUANCE -	Instructing party name * BDF
Instructing party BIC * BDFEFR2TXXX		
Operation context *		
DEDICATED CASH WALLETS		
Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC * CCBCNSPPXXX	
Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC * Choose Credited Dedicated Cash Wall •	
TRANSFER		
Amount * Curre 0 EUR		

New CBDC operation

- Then, one has to fill in:
 - *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.

- 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
- Following information are already filled in:
 - Instructing party name, the name of the issuer instructing the issuance
 - o Instructing party BIC, the BIC of the issuer instructing the issuance
 - 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 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 QA Monetary Protection		Calendar date 05-15-2024 20:07:29 Business date 05-02-2024 Business window Open for All	singleuser @ BD Dedicated Cash Wa Dedicated Cash Wa +2	illet Owner
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
Ó	Dedicated Cash Wallets	CBDC Operations - 4 Eyes				
6	T2 accounts		Owned Man	aged Issued		
₽	CBDC Operations	CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	
ñ	Global	Bug_Confirmation	ISSUANC	E WAITING_FOR_APPROVAL	05-14-2024 11:31:34	EUF
ñ	External network	ISSU_EUROTRANSIT_PBSWALLET001_2024051	52000 ISSUANC	CE WAITING_FOR_APPROVAL	05-15-2024 20:06:35	EUF
Ø	Reporting	iss	ISSUANC	CE CANCELLED	05-07-2024 15:56:48	EUF
₽	4 eyes pending validation	Dedicated Cash Wallets				•
න	User administration	CBDC Operations				

• 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 QA Monetary Branchel Stations	Economic	Calendar date 05-15-2024 20:09:23 Business date 05-02-2024 Business window Open for All	singleuser2 @ B Dedicated Cash Wa Dedicated Cash Wa +2	allet Owner
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
Ó	Dedicated Cash Wallets	CBDC Operations - 4 Eyes Pr	OCESS	aed Issued		
	T2 accounts		Miled Manaj	leaner leaner		
đ	CBDC Operations	CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	
ñ	Global	Bug_Confirmation	ISSUANCE	WAITING_FOR_APPROVAL	05-14-2024 11:31:34	EUF
ů	External network	ISSU_EUROTRANSIT_PBSWALLET001_202405152000	ISSUANCE	WAITING_FOR_APPROVAL	05-15-2024 20:06:35	EUF
Ø	Reporting	iss	ISSUANCE	CANCELLED	05-07-2024 15:56:48	EUF
₽	4 eyes pending validation	Dedicated Cash Wallets	_			•
ð	User administration	CBDC Operations				

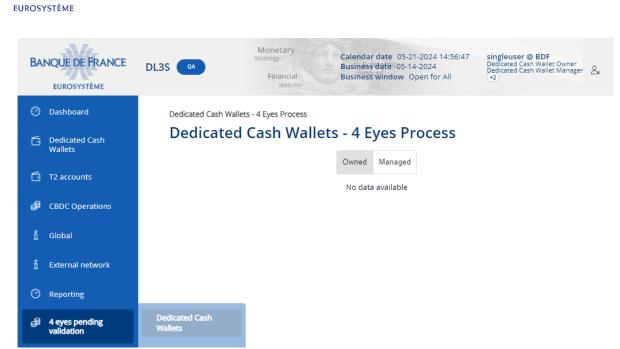
• By clicking on the operation ID, the second user has access to the issuance operation information. It is only readable information, no modification can be made.

	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Monetary strategy Economic Financial sub-icy	Calendar date 05-15-2024 20:11:51 Business date 05-02-2024 Business window Open for All	singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2	&
Ø	Dashboard	Dedicated Cash WAL	LETS			
G	Dedicated Cash Wallets	Debited Dedicated Cash Wa	llet * Debited Dedi	cated Cash Wallet Manager BIC *		
		EUR_TRANSIT	CCBCNSPPXX	X		
G	T2 accounts					
₽	CBDC Operations	Credited Dedicated Cash Wa	allet * Credited Ded	icated Cash Wallet Manager BIC *		
ñ	Global					
ñ	External network	TRANSFER				
Ø	Reporting	Amount *	Currency *			
a	A ever pending	2000	Euro	~		
8,	4 eyes pending validation	* Required Field				
ð	User administration	BACK TO BE REVIE	WED APPROVE			

• 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 pending validation tab



- 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.

	BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	Monetary strategy Financial stability	Economic services	Calendar date 05-15-2024 Business date 05-02-2024 Business window Open fr	4	singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2
Ø	Dashboard	CBDC					
Ó	Dedicated Cash Wallets	CBDC O	perations - issued			Crea	te a CBDC Operation
6	T2 accounts	🗢 CBDC Oper	ation ID	🗢 Status	🗢 Туре	▲ Accepted Timestan	np \$ Settled Timestamp
₽	CBDC Operations	Create a CBDC Operation	NSIT_PBSWALLET001_202405152000	SETTLED	Issuance	05-15-202 20:12:59	24 05-15-2024 20:13:27
ñ	Global	Owned	ance	SETTLED	Issuance	05-14-202 14:02:42	24 05-14-2024 14:03:20
ñ	External network	Managed		SETTLED	Issuance	05-14-202 11:25:27	24 05-14-2024 11:25:56
Ø	Reporting			SETTLED	Issuance	05-07-202 14:28:42	24 05-07-2024 14:29:10
		Issued		SETTLED	Issuance	05-07-202 14:24:57	24 05-07-2024 14:25:34
đ	4 eyes pending validation	National supervised		SETTLED	Issuance	05-07-202 14:24:56	24 05-07-2024 14:25:36
8	User administration			_			•

BANQUE DE FRANCE



	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	strø	Financial stability	Business dat	te 05-15-2024 20:: e 05-02-2024 ndow Open for All	Dedicated C Dedicated C	r2 @ BDF Cash Wallet Owner Cash Wallet Manager 2
Ø	Dashboard	CBDC						
Ó	Dedicated Cash Wallets	CBDC Op	erations - issu	ued			Create a CBD0	Operation
G	T2 accounts	🗢 CBDC Operati	on ID	🗢 Stat	us 🗢 Ty	pe 🔺	Accepted Timestamp	Settled Timestamp
₽	CBDC Operations	ISSU_EUROTR/	ANSIT_PBSWALLET001_202	405152000 SETT	LED Is:	uance	05-15-2024 20:12:59	05-15-2024 20:13:27
ñ	Global	PBDClient_Issu	lance	SETT	LED Iss	uance	05-14-2024 14:02:42	05-14-2024 14:03:20
•		Issuance_Test	2	SETT	LED Iss	uance	05-14-2024	05-14-2024
ñ	External network	pbgissuance		SETT	LED Iss	uance	11:25:27 05-07-2024	11:25:56 05-07-2024
0	Reporting	issuancepbg		SET	TED Iss	uance	14:28:42 05-07-2024	14:29:10 05-07-2024
₽	4 eyes pending						14:24:57	14:25:34
	validation	issuancepbs		SET	LED ISS	uance	05-07-2024 14:24:56	05-07-2024 14:25:36
a	User administration							•
	BANQUE DE FRANCE Eurosystème	DL3S QA		Financial stability	mic Business dat	te 05-15-2024 20: te 05-02-2024 ndow Open for All	Dedicated O	r 2 @ BDF Cash Wallet Owner Cash Wallet Manager 🔗
Ø	Dashboard	CBDC ope T001 202	eration ISSU_I 405152000	UROTRAN	SIT_PBSW	ALLE		
Ó	Dedicated Cash Wallets	Timeline					lready Settled	
Ō	T2 accounts	Initializ	red	Accepted		Settled		
₽	CBDC Operations			- 🕗 —			100)%
ñ	Global	05-15-2 BD 05-02-2	2024 20:06:35	05-15-2024 20:1	2:59 05-15-2024 2 05-02-2024	0:13:27		
ñ	External network							Amount
Ø	Reporting	Details					Dbjective	2000 € 2000 €
₽	4 eyes pending validation	CBDC operat		Counterpart	PBS_WALLE			
න	User administration	Type Status	ISSUANCE	Amount Currency		2000 EUR		
Ø	Parameters BANQUE DE FRANCE EUROSYSTEME		sh Wallet EUR_TRANSIT	Initiator netary inancial stability	Business dat	euser e 05-15-2024 20:1	Dedicated Ca	2 @ BDF ash Wallet Owner ash Wallet Manager 2x
Ø	Dashboard	Dedicated Cash Wal	lets					
Ó	Dedicated Cash Wallets	Create a Dedicated Cash Wallet	l Cash Wallet	s - owned				Inactive
Ó	T2 accounts	Owned		Standa	d Issuance			
₽	CBDC Operations	Managed				Filter		Q
ñ	Global	National supervised	🗢 Wallet Alias	Manager BIC	Manager Short Name	Currency	🗢 Available	🗢 Cou
ñ	External network	DXT2PBD001	PBD_WALLET_001	BDFEFR2TXXX	PBD	EUR	75	DX
		DXT2PBD003	PBD_WALLET_003	BDFEFR2TXXX	PBD	EUR	0	DX
		DXT2PBD001	PBD_WALLET_XXX	BDFEFR2TXXX	PBD	EUR	0	DX
Ø	Reporting			DDEEEE	DDC	ELLE.		
	4 eyes pending	FRT2PBG001	PBG_WALLET_001	BDFEFR2TXXX	PBG	EUR	10415	FR
		FRT2PBG001 NNT2PBR001 FRT2PBS001	PBG_WALLET_001 PBR_WALLET_001 PBS_WALLET_001	BDFEFR2TXXX BDFEFR2TXXX BDFEFR2TXXX	PBG PBR PBS	EUR EUR EUR	10415 0 21565	FR NN FR



) Dashbo	PBS		Cash postings history		×
Dedicat Wallets		PBS_WALLET_001 PBSOFRXXDLT	Date range: Sta	art date – End da	ite 🗮 C tive
] T2 acco	Currency	EUR	Instruction ID	Operation Type	Amount
	T2 Account OP Country Code	FRT2PBS001 FR	ISSU_EUROTRANSIT_PBSWALLET001_202405152000	ISSUANCE	+2 000
Global	Manager BIC	BDFEFR2TXXX	TRANSFER_PBS_PBG	TRANSFER	-150
			Transfer_Test	TRANSFER	-30
Externa	il r		PBS_Transfer	TRANSFER	-55
) Reporti	ng		Issuance_Test2	ISSUANCE	+100
4 eyes p validation			4		
User ad	Im		Items per page: 5 👻 1	– 5 of 11	< > >I

4.2.2 4 eyes process review

• 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 QA Monetary Brandwith Brandwith Brandwith Brandwith	Scongmic sentices	Calendar date 05-15-2024 20:31:15 Business date 05-02-2024 Business window Open for All	singleuser2 @ Dedicated Cash W Dedicated Cash W +2	allet Owner
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
G	Dedicated Cash Wallets	CBDC Operations - 4 Eyes P	Owned Manag	aed Issued		
G	T2 accounts		ownou manag			
₽	CBDC Operations		🗢 Туре	🗢 Status	Status Timestamp	
ñ	Global	Bug_Confirmation	ISSUANCE	WAITING_FOR_APPROVAL	05-14-2024 11:31:34	EUF
ñ	External network	ISSU_EUROTRANSIT_PBSWALLET001_202405152027	ISSUANCE	TO_BE_REVIEWED	05-15-2024 20:30:28	EUF
Ø	Reporting	iss	ISSUANCE	CANCELLED	05-07-2024 15:56:48	EUF
₽	4 eyes pending validation	Dedicated Cash Wallets	_			•
න	User administration	CBDC Operations				

- 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 EUROSYSTÈME	DL3S QA Monetary scongert Calendar date 05-15-2024 20:34:14 singleuser @ Dedicated Cash bedicated Cash bedicate	3DF Wallet Owner Wallet Manager
Ø	Dashboard	4 Eves Process > ISSU_EUROTRANSIT_PBSWALLET001_202405152027	
Ó	Dedicated Cash Wallets	4 Eyes Process	
G	T2 accounts		
₽	CBDC Operations	CBDC Operation ID * Type * ISSU_EUROTRANSIT_PBSWALLET001_202405152027 ISSUANCE	
ñ	Global	Instructing party name * Instructing party BIC *	
ñ	External network	BDF BDFEFR2TXXX	
Ø	Reporting	External network *	
Ø	Dashboard	Dedicated Cash WALLETS	
Ó	Dedicated Cash Wallets	Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC *	
G	T2 accounts	EUR_TRANSIT CCBCNSPPXXX	
₽	CBDC Operations	Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC *	
ñ	Global	PBS_WALLET_001 BDFEFR2TXXX	
ñ	External network	TRANSFER	
Ø	Reporting	Amount * Currency *	
₽	4 eyes pending validation		
2	User administration	* Required Field BACK CANCEL REVIEW	

2

• 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 <u>4.2.1</u>).

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 *Create a CBDC* Operations tab in CBDC Operations tab.
- One firstly needs then to select the transfer type and the operation context, intra-manager or crossmanager. Depending on context, some fields will be pre-filled:
- For a transfer in an intra-manager context, one has to fill in



	BANQUE DE FRANCE Eurosystème	DL3S QA	Monetary Economic Business date 05-15-2024 15:40:13 Ferniority Business date 05-02-2024 Business window Open for All	singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2
Ø	Dashboard	CBDC operation > New CBDC opera	ation	
Ó	Dedicated Cash Wallets	New CBDC operat	tion	
6	T2 accounts	PARTIES		
		CBDC Operation ID *	Type *	
đ	CBDC Operations	TRANSFER_PBS_PBG	TRANSFER	
ñ	Global	Instructing party name *	Instructing party BIC *	
		BDF	BDFEFR2TXXX	
ů	External network			
Ø	Reporting	Operation context *		
₽	4 eyes pending validation	Intra manager Cross m	anager	
Ø	Dashboard	DEDICATED CASH WALL	LETS	
Ó	Dedicated Cash Wallets	Debited Dedicated Cash Wallet	* Debited Dedicated Cash Wallet Manager BIC *	
		PBS_WALLET_001	▼ BDFEFR2TXXX	
Ō	T2 accounts			
₽	CBDC Operations	Credited Dedicated Cash Wallet	* Credited Dedicated Cash Wallet Manager BIC *	
•		PBG_WALLET_001	▼ BDFEFR2TXXX	
ñ	Global			
ñ	External network	TRANSFER		
Ø	Reporting	Amount *	Currency *	
J	Reporting	150	EUR	
₽	4 eyes pending validation			
ð	User administration	* 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.
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- Amount corresponds amount of the issuance
- The following information will be pre-filled for an intra-manager transfer:
 - Instructing party name, the name of the party instructing the transfer
 - Instructing party BIC, the BIC of the party instructing the transfer
 - Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet
 - *Credited Dedicated Cash Wallet Manager BIC* corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
 - *Currency* corresponds to the currency of the CBDC transferred
- For a transfer in a cross-manager context, one has to fill in



New CBDC operation

PARTIES	
CBDC Operation ID *	Type *
Instructing party name *	Instructing party BIC *
BDF	BDFEFR2TXXX
Operation context *	
DEDICATED CASH WALLETS	
Debited Dedicated Cash Wallet *	Dahited Dedicated Cash Wallet Manager RIC *

Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC *
Choose Debited Cash Wallet Alias	•
Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC *

TRANSFER		
Amount *	Currency *	
0	EUR	

- * Reauired Field
- 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.
- o Debited Dedicated Cash Wallet corresponds to the debited Wallet alias
- Credited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the credited Dedicated Cash Wallet
- o Credited Dedicated Cash Wallet corresponds to the credited Wallet alias
- Amount corresponds amount of the issuance
- The following information will be pre-filled for an intra-manager transfer:
 - o Instructing party name, the name of the party instructing the transfer
 - o Instructing party BIC, the BIC of the party instructing the transfer
 - Debited Dedicated Cash Wallet Manager BIC corresponds to the BIC of the manager of the debited Dedicated Cash Wallet



- o Currency corresponds to the currency of the CBDC transferred
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations 4 eyes*.

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Monetary strategy Financial stability	Calendar date 05-15-20. Economic Business date 05-02-20. Business window Open	24	ingleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manage +2
🕐 Dashboard	CBDC Operations - 4 Eyes Process				
Dedicated Cash Wallets	CBDC Operations		Process		
T2 accounts		0,	ned Managed Issued		
CBDC Operations	CBDC Operation ID	🗢 Туре	⇔ Status	Status Timestamp	
n Global	ISSU_PBS_PBG_202405101608	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:08:48	PBS_WALLET
n External network	TRANSFER_PBS_PBG	TRANSFER	WAITING_FOR_APPROVAL	05-15-2024 15:43:08	PBS_WALLET
⑦ Reporting					Þ
4 eyes pending validation					

- You need to connect with the single user you didn't use to create the operation
- Go to **4** eyes process / CBDC operations and click on the CBDC operation ID just created with the previous single user

	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA	Monetary strategy Financial stability	Calendar date 05-15-20 Economic Business date 05-02-20 Business window Open	24 D	ngleuser2 @ BDF edicated Cash Wallet Owner edicated Cash Wallet Manage 2
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
	Dedicated Cash Wallets	CBDC Operations	- 4 Eyes P			
G	T2 accounts			ina managoa locada		
₽	CBDC Operations		🗢 Туре	🗢 Status	Status Timestamp	Debited Dedicated Cash Wallet
ñ	Global	ISSU_PBS_PBG_202405101608	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:08:48	PBS_WALLET
ñ	External network	TRANSFER_PBS_PBG	TRANSFER	WAITING_FOR_APPROVAL	05-15-2024 15:43:08	PBS_WALLET
Ø	Reporting					×
ð	4 eyes pending validation					

• Validate the transfer operation by clicking on the *Approve* button



	BANQUE DE FRANCE Eurosystème	DL3S QA	Monetary Transfer Financial Financial Economic Business date 05-02-2024 Business window Open for All Stelling Control (Control (Cont
Ø	Dashboard	Dedicated Cash WALLETS	
Ó	Dedicated Cash Wallets	Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC *
Ó	T2 accounts	PBS_WALLET_001	BDFEFR2TXXX
ß	CBDC Operations	Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC *
ñ	Global	PBG_WALLET_001	BDFEFR2TXX
ñ	External network	TRANSFER	
Ø	Reporting	Amount *	Currency *
9	4 eyes pending validation	150	Euro
ð	User administration	* Required Field BACK TO BE REVIEWED	APPROVE

• Go to the CBDC **Operations / managed**, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".

BANQUE DE FRANCE Eurosysteme	DL3S 🔍	Economic BL Services	llendar date 05-15-2024 15: isiness date 05-02-2024 isiness window Open for All	Dedicated Cas Dedicated Cas	: @ BDF sh Wallet Owner sh Wallet Manager			
🕐 Dashboard	CBDC							
Dedicated Cash Wallets	CBDC Operatior	CBDC Operations - managed						
T2 accounts	Туре	•						
Generations	CBDC Operation ID	♦ Status		ccepted mestamp Ti	ettled mestamp			
n Global	TRANSFER_PBS_PBG	SETTLED			-15-2024 :54:00			

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 😱		onomic	Calendar date 05-15-20 Business date 05-02-20 Business window Open	24 Ded Ded	gleuser2 @ BDF licated Cash Wallet Owner licated Cash Wallet Manager &
Ø	Dashboard	Dedicated Cash Wallets					
G	Dedicated Cash Wallets	Dedicated Cash Wal	lets - manageo	ł	Create a Dec	icated Cash wallet	Inactive
G	T2 accounts		Stand	ard Issuanc	e		
₽	CBDC Operations				Filter		Q
ñ	Global	Wallet ID	¢ Ţ	2 Account eference	🗢 Wallet Alias	Owner BIC	Owner Short Name
ñ	External network	Ajb65XYvoAacNlqusR7NoNF2qBeV9t	JEcStJXyUUdJs= E	XT2PBD001	PBD_WALLET_001	PBDEDXXXDLT	PBD
0		poYXEtHOD7BGr0jI0QzQZV6IH1Zuv5	AmT3B6jMWyC0Y= D	XT2PBD003	PBD_WALLET_003	PBDEDXXXDLT	PBD
Ø	Reporting	eHy3wEcrzUdNWgI03GXwIwAYqnZV0	GVvCOugFq1ISGkI=	XT2PBD001	PBD_WALLET_XXX	PBDEDXXXDLT	PBD
P	4 eyes pending validation	V6tsFvP4a47dDPt4Bgm2S2vjLFOnHa	qWwhVQ20NIYMQ= F	RT2PBG001	PBG_WALLET_001	PBGSGGXXDLT	PBG
		By4OVj6Mo5wNev3+yM+0pLmL+N5r	mXXT1TUWV9va0ixE=	INT2PBR001	PBR_WALLET_001	PBRBNNXXDLT	PBR
2	User administration	N8NHRC48vP0r1W8UKtbla4hoaOTK0	DdwP1ys9cEz9U8k= F	RT2PBS001	PBS_WALLET_001	PBSOFRXXDLT	PBS



Cash Wallet PBG_WALLET_001 Owner BIC PBGSGGXXDLT Currency EUR T2 Account FRT2PBG001 Country Code FR	
Owner BIC PBGSGGXXDLT Currency EUR Instruction ID Operation Type Amount Date/Time Counter T2 Account FRT2PBG001 TRANSFER_PBS_PBG TRANSFER +150 05-15-2024 PBSOF	Ē
T2 Account FRT2PBG001 TRANSFER_PBS_PBG_TRANSFER +150 05-15-2024 PBSOF	ت
TRANSFER_PBS_PBG TRANSFER +150 05-15-2024 PBSOF	art ID
	XXDLT
Manager BIC BDFEFR2TXXX PBG_Redemption REDEMPTION -5 05-14-2024 19:41:28	
DCWOwner_Transfer TRANSFER -15 05-14-2024 19:30:23	
Transfer_Test TRANSFER +30 05-14-2024 PBSOF 18:06:14	XXDLT
PBS_Transfer TRANSFER +55 05-14-2024 PBSOF 17:50:36 17:5	RXXDLT

4.3.2 CBDC transfer instructed by a *Dedicated Cash Wallet owner*

• The flow is exactly the same as for a *Dedicated Cash Wallet manager*

.

• One can access the creation file by clicking on the subtab Create a CBDC Operation subtab

② Dashboard	<u>CBDC operation</u> > New		
Dedicated Cash Wallets	New CBDC		
T2 accounts	PARTIES		
CBDC Operations	Create a CBDC Operation		
ក្នំ Global	Owned		
ຖື External network	Managed		
ш	Manageu		

- Select the transfer type and the operation context, intra-manager or cross-manager.
- Depending on the operation context selected, some field will be pre-filled or not. The *Dedicated Cash Wallet Owner* has to fill in the form:

BDF Service description external / v1.6



	BANQUE DE FRANCE EUROSYSTÈME	DL3S CA Monetary Calendar date 05-10-2024 16:44:55 singleuser @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Owner Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian Cash Wallet Cu	2×
Ø	Dashboard	<u>CBDC operation</u> > New CBDC operation	
G	Dedicated Cash Wallets	New CBDC operation	
Ó	T2 accounts	PARTIES	
₽	CBDC Operations	CBDC Operation ID * Type * TRANSFER PBS PBG 202405101643 TRANSFER	
ñ	Global	Instructing party name * Instructing party BIC * PBS PBSOFRXXDLT	
ñ	External network	On Behalf Client Entity ID	
₽	4 eyes pending validation		
2	User administration	Operation context *	
0	Parameters		
Ø	Dashboard	DEDICATED CASH WALLETS	
G	Dedicated Cash Wallets	Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC *	
Ó	T2 accounts	PBS_WALLET_001 BDFEFR2TXXX	
₽	CBDC Operations	Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC *	
ñ	Global	PBG_WALLET_001	
ñ	External network	TRANSFER	
₽	4 eyes pending validation	Amount * Currency *	
2	User administration	EUR	
Ø	Parameters	* 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
- 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 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
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations* 4 eyes.

BANQUE DE FRANCE Eurosystème	DL3S QA Br	EconBu	lendar date 05-10-2024 16:48:2 isiness date 01-09-2023 isiness window Open for All	Dedicated Cash	9 PBS 9 Wallet Owner O 9 Wallet Custodian
🕐 Dashboard	CBDC Operations - 4 Eyes Process				
Dedicated Cash Wallets	CBDC Operations - 4	Eyes Proce	Managed		
T2 accounts		Owned	Managed		
B CBDC Operations	♦ CBDC Operation ID	🗢 Туре		Status Timestamp	◆ Debited Dedicate Wallet
<u>n</u> Global	TRANSFER_PBS_PBG_202405101643	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:47:03	PBS_WAL

- You need to connect with the single user you didn't use to create the operation
- Go to 4 eyes process / CBDC operations and click on the CBDC operation ID just created with the previous single user

BANQUE DE FRANCE EUROSYSTÈME		Econ BU services	lendar date 05-10-2024 16:50:0 siness date 01-09-2023 siness window Open for All	Dedicated Cash	
⑦ Dashboard	CBDC Operations - 4 Eyes Process				
Dedicated Cash Wallets	CBDC Operations - 4	Eyes Proce	ess		
T2 accounts		Owned	Managed		
BCBDC Operations	CBDC Operation ID	🗢 Туре	⇔ Status	Status Timestamp	Debited Dedicate Wallet
ក្នំ Global	TRANSFER_PBS_PBG_202405101643	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:47:03	PBS_WAL

• Validate the transfer operation by clicking on the Approve button

	BANQUE DE FRANCE EUROSYSTÈME		Monetary Stategy Financial Stategy Calendar date 05-10-2024 16:51:19 Stategy Financial Stategy Business window Open for All Stategy State
Ø	Dashboard	Dedicated Cash WALLET	rs
Ó	Dedicated Cash Wallets	Debited Dedicated Cash Wallet *	* Debited Dedicated Cash Wallet Manager BIC *
G	T2 accounts	PBS_WALLET_001	BDFEFR2TXXX
₽	CBDC Operations	Credited Dedicated Cash Wallet	* Credited Dedicated Cash Wallet Manager BIC *
ň	Global	PDG_WALLEI_001	DUPERCIAM
ñ	External network	TRANSFER	
₽	4 eyes pending validation	Amount *	Currency *
ର୍ଷ	User administration	* Required Field	
٢	Parameters	BACK TO BE REVIEWED	APPROVE

• Go to the CBDC *Operations / owned*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".



BANQUE DE FRANCE EUROSYSTÈME			Calendar date 05-10-20 Business date 01-09-20 Business window Oper	23 Dec	ngleuser2 @ PBS dicated Cash Wallet Owner dicated Cash Wallet Custodi
⑦ Dashboard	CBDC				
Dedicated Cash Wallets	CBDC Operations - o	wned		Creat	te a CBDC Operation
T2 accounts	Туре 👻				
T2 accounts	CBDC Operation ID	♦ Status	🗢 Туре	▲ Accepted Timestamp	♦ Settled Timestamp
		Status SETTLED	◆ Type Transfer		

• **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 file to create a CBDC operation by clicking on the *create a CBDC operation* subtab.



- Select the transfer type and the operation context, intra-manager or cross-manager.
- Fill the On Behalf Client Entity ID field
- One has to fill in the form:

	BANQUE DE FRANCE Eurosystème	DL3S QA	Monetary strategy Financial stability	Calendar date 05-10-2024 17 Business date 04-12-2023 Business window Open for A	Dedicated Cash Wallet Owner	n 8
Ø	Dashboard	<u>CBDC operation</u> > New CBDC operation				
G	Dedicated Cash Wallets	New CBDC operation				
Ó	T2 accounts	PARTIES				
₽	CBDC Operations	CBDC Operation ID * TRANSFER_PBSCLI1_PBGCLI1_202405101726	Type *	•		
ñ	Global	Instructing party name *	Instructing party BIC *			
ñ	External network	PBS On Behalf Client Entity ID	PBSOFRXXDLT			
₽	4 eyes pending validation	00CLI1PBSINVESTOR000001				
8	User administration	Operation context *				
0	Parameters	 Intra manager Cross manager 				

JSYSTÈME	
Dashboard	DEDICATED CASH WALLETS
Dedicated Cash Wallets	Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC *
	PBS_CLI1_WALLET PBSOFRXXDLT
T2 accounts	
CBDC Operations	Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * PBG CLI1 WALLET PBGSGGXXDLT
] Global	PBG_LLIT_WALLET
External network	TRANSFER
4 eyes pending validation	Amount * Currency *
validation	10 EUR
Cuser administration	* Required Field
Parameters	
	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

BANQUE DE FRANCE

- 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
- Eternal button should be no has the transfer 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 CBDC transferred
- It is to be noted that according to the operation context selected, some field will be pre-filled or not.
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations* 4 eyes.

	BANQUE DE FRANCE Eurosystème	DI 35 QA	enetary Pay Econom Financial Services Robiny	Calendar date 05-10 Business date 04-12 Business window Op	2023	singleuser2 @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodia	an &
Ø	Dashboard	CBDC Operations - 4 Eyes Process					
G	Dedicated Cash Wallets	CBDC Operations - 4 Eyes					
G	T2 accounts		Owned	Managed			
₽	CBDC Operations	♦ CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	 Debited Dedicated Cash Wallet 	
ñ	Global	TRANSFER_PBSCLI1_PBGCLI1_202405101726	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 17:30:52	PBS_CLI1_W	

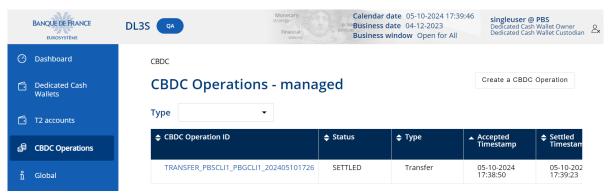
• You need to connect with the single user you didn't use to create the operation



• Go to 4 eyes process / CBDC operations and click on the CBDC operation ID just created with the previous single user

	BANQUE DE FRANCE Eurosystème	DL3S 🗛)	Monetary strategy Financial stability	Econ Business	date 05-10-2024 17:34 date 04-12-2023 window Open for All	Dec	gleuser @ PBS dicated Cash Wallet Owner dicated Cash Wallet Custodia
Ø	Dashboard	CBDC Ope	erations - 4 Eyes Process					
Ó	Dedicated Cash Wallets	CBDC	C Operations	- 4 Eyes P	rocess			
6	T2 accounts				Owned Mana	aged		
₽	CBDC Operations		Operation ID	¢ 1	уре	🗢 Status		Status Timestamp
ñ	Global	TRAN	SFER_PBSCLI1_PBGCLI1_2	02405101726 T	RANSFER	WAITING_FOR_AP	PROVAL	05-10-2024 17:30:52
	BANQUE DE FRANCE EUROSYSTÈME	DL3S 😱	stra	Financial statulity	Business date	05-10-2024 16:51:19 01-09-2023 low Open for All	Dedicated	er2 @ PBS Cash Wallet Owner Cash Wallet Custodian
Ø	Dashboard	Dedic	ated Cash WALLETS					
	Dedicated Cash Wallets	1000000	d Dedicated Cash Wallet *			Cash Wallet Manager BIC	:*	
6		1000000	d Dedicated Cash Wallet *		ited Dedicated	Cash Wallet Manager BIG	*	
	Wallets	PBS_W		В	DFEFR2TXXX	Cash Wallet Manager Bio		
6	Wallets T2 accounts	PBS_W	VALLET_001	Cre	DFEFR2TXXX			
	Wallets T2 accounts CBDC Operations	PBS_W	valleT_001 d Dedicated Cash Wallet * walleT_001	Cre	DFEFR2TXXX			
	Wallets T2 accounts CBDC Operations Global	PBS_W Crediter PBG_V	d Dedicated Cash Wallet * walleT_001	Cre	DFEFR2TXXX			
i i	Wallets T2 accounts CBDC Operations Global External network 4 eyes pending	PBS_W Crediter PBG_V TRAN	d Dedicated Cash Wallet * walleT_001	Currency *	DFEFR2TXXX	l Cash Wallet Manager Bl		

• Go to the CBDC *Operations / owned*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".



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



4.4 CBDC payments

A CBDC payment consist in paying a cash amount by debiting a Cash Wallet and crediting another Cash Wallet. It 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
- Dedicated Cash Wallet user on a Dedicated Cash Wallet he owns

4.4.1 CBDC payment instructed by a Dedicated Cash Wallet manager

- One needs to connect as a **Dedicated Cash Wallet manager** and to click on the *Create a CBDC Payments* tab in *CBDC Payments* tab.
- The screen is open, displaying 3 main parts
 - Parties
 - CBDC Payment ID
 - it is to be unique
 - Commonly the form is PAYMENT_debited_wallet_alias_credited wallet alias_date&time
 - CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore
 - If filled with another special character, an error message will appear and prevent the submission of the request
 - 'Instructing party name' is pre-filled with manager details
 - 'Instructing party BIC' is pre-filled with manager details
 - Supplementary Data
 - Optional field
 - Operation context
 - intra-manager
 - cross-manager
 - o Dedicated Cash Wallets
 - Debited Dedicated Cash Wallet
 - Is select from a dropdown list populated by all the wallets managed
 - Debited Dedicated Cash Wallet Manager BIC
 - Is deduced from the 'Debited Dedicated Cash Wallet'
 - Credited Dedicated Cash Wallet
 - Credited Dedicated Cash Wallet Manager BIC
 - o Transfer
 - Amount : corresponds amount of the payment
 - *Currency* : corresponds to the currency of the CBDC transferred
 - Payment Date :
 - Is the current business Date by default
 - can be in the past or in the future
- 4.4.1.1 Intra-manager context : specific behaviour
- Dedicated Cash Wallets
 - Credited Dedicated Cash Wallet
 - Is select from a dropdown list populated by all the wallets managed
 - Credited Dedicated Cash Wallet Manager BIC



- Is deduced from the 'Credited Dedicated Cash Wallet'
- Copy screen •

BANQUE DE FRANCE EUROSYSTÈME	DL3S 🐢	Financial stability	Economic services	Calendar date 05-31-2024 11:13:38 Business date 05-06-2024 Business window Open for All	singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager & (*2)
② Dashboard	CBDC Payment > New CBDC Payment				
Dedicated Cash Wallets	New CBDC Payment				
	PARTIES				
T2 accounts	CBDC Payment ID *	Instructing party name *	Instructing party BIC *	Supplementary Data	
CBDC Operations	Reyment_Intra_001	BDF	BDFEFR2TXXX		
GBDC Payments	Operation context *				
n Global	Intra manager Cross manager				
n External network	DEDICATED CASH WALLETS				
Reporting	Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC *			
4 eyes pending validation	PBG_WALLET_001	- BDFEFR2TXXX			
路 User administration	Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC *	•		
Parameters	PBR_WALLET_001	▼ BDFEFR2TXXX			
	TRANSFER				
	Amount *	Currency * Payn	nent Date *		
	265	EUR 5/	5/2024		
	* Required Field				
	CANCEL SUBMIT				

4.4.1.2 Cross-manager context: specific behaviour

Dedicated Cash Wallets •

- Credited Dedicated Cash Wallet
 - Is to be entered manually
 - Must be the exact value of the wallet alias
- Credited Dedicated Cash Wallet Manager BIC
 - Is select from a dropdown list populated by all the BIC managers known on DL3S
- Copy screen •

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Monetary strategy Economic Business date 05-05-2024 12:37:31 stability services Business window Open for All
🕐 Dashboard	CBDC Payment > New CBDC Payment
Dedicated Cash Wallets	New CBDC Payment
🗇 T2 accounts	PARTIES
	CBDC Payment ID * Instructing party name * Instructing party BIC * Supplementary Data
CBDC Operations	Payment_Intra_001 BDF BDFFICTOX
CBDC Payments	Operation context *
n Global	Intra manager Cross manager
n External network	DEDICATED CASH WALLETS
Reporting	
🖨 4 eyes pending	Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC * PB0_WALLET_001 B0FFR2TXXX
validation	Le segurit de la contra de la c
路 User administration	Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC *
Parameters	walet-dod
	TRANSFER
	Amount * Currency * Payment Date *
	265 EUR 5/6/2024
	* Required Field
	CANCEL SUBMIT
	UNITEL SUBILI
BDF Service des	cription external / v1.6 92



4.4.1.3 Action

After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations – 4 eyes*.

BANQUE DE FRANCE EUROSYSTÈME	DL3S	QA		strat	Financial stability	Economic services		Business of	date 05-31-2024 12:41 date 05-06-2024 window Open for All	:37 singleuse Dedicated C Dedicated C (+2)	r @ BDF ash Wallet Owner ash Wallet Manager
 Dashboard Dedicated Cash Wallets 		CBDC Payments - 4 Eyes I	ents - 4 Eyes Proc	cess		Owned					
T2 accounts						Owned					
CBDC Operations		CBDC Payment ID		Status Timestamp	Debited Dedicated Cash Wallet	Manager BIC debited DCW	Credited Dedicated Cash Wallet	Manager BIC Credited DCW	¢ Amount	Currency	¢ In
CBDC Payments		Payment_Demo_001	WAITING_FOR_APPROVAL	05-31-2024 12:41:25	PBD_WALLET	BDFEFR2TXXX	PBR_WALLET	BDFEFR2TXXX	890	EUR	si
n Global											Þ
n External network											
② Reporting											
4 eyes pending validation	Dedicated Wallets	Cash									
路 User administration	CBDC Ope	rations									
Parameters	CBDC Pay	ments									
	T2 Account	ts									
	Whitelists										

- You need to connect with the single user you didn't use to create the operation
- Go to *4 eyes process / CBDC payment* and click on the *CBDC payment ID* just created with the previous single user
- Validate the transfer operation by clicking on the *Approve* button

BANQUE DE FRANCE EUROSYSTÈME	DL3S 💁		Economic	Calendar date 05-31-2024 12:44:45 Business date 05-06-2024 Business window Open for All	singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager & +2
Ø Dashboard	4 Eyes Process > Payment_Demo_001				
Dedicated Cash Wallets	4 Eyes Process				
T2 accounts	PARTIES				
	CBDC Payment ID *	Instructing party name *	Instructing party BIC *	Supplementary Data	
CBDC Operations	Payment_Demo_001	BDF	BDFEFR2TXXX	MARGIN_CALL_ISIN01	
BCBDC Payments					
n Global	Operation context *				
n External network	DEDICATED CASH WALLETS				
⑦ Reporting					
4 eyes pending validation	Debited Dedicated Cash Wallet * PBD_WALLET_001	Debited Dedicated Cash Wallet Manager BIC * BDFEFR2TXXX			
路 User administration	Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC *			
Parameters	PBR_WALLET_001	BDFEFR2TXXX			
	TRANSFER				
	Amount * Currency	y* Payment Da	ite *		
	890 Euro	♥ 5/6/2024	-		
	* Required Field				
	BACK TO BE REVIEWED APPROV	E			

- Go to the CBDC *Payments / managed*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".
- List of payments



4.4.2 CBDC payment instructed by a Dedicated Cash Wallet Owner or Custodian

- The flow is exactly the same as for a Dedicated Cash Wallet manager
- One can access the creation file by clicking on the subtab Create a CBDC Payment subtab

BANQUE DE FRANCE EUROSYSTÈME	DL3S	QA			Monetary strategy Financial stability	Economic services		Calendar date 05-31-2024 13:05:36 Business date 05-06-2024 Business window: Open for All	singleuser @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian
⑦ Dashboard		CBDC Payment > New CBDC Payment							
Dedicated Cash Wallets		New CBDC Paymen	t						
🗂 T2 accounts		PARTIES							
CEDC Operations		CBDC Payment ID * Payment_Owned_Demo-002		Instructing party name *		ucting party BIC *	Supplementary Data	On Behalf Client Entity ID	
CBDC Payments	Create a CBD Payment	Operation context *							
n Global	Owned	Intra manager Cross manager	per						
n External network	Managed	DEDICATED CASH WALLET	s						
4 eyes pending validation		Debited Dedicated Cash Wallet *		Debited Dedicated Cash Wallet Mana	ger BIC *				
路, User administration		PBS_CLI2_WALLET	•	PBSOFRXIDLT					
Parameters		Credited Dedicated Cash Wallet *		Credited Dedicated Cash Wallet M PBBILLXXDLT	anager BIC *				
		TRANSFER							
		Amount *	Currency		Payment Date *				
		789	EUR		5/6/2024				
		* Required Field							

- •
- Select the operation context, intra-manager or cross-manager.
- Depending on the operation context selected, some field will be pre-filled or not. The *Dedicated Cash Wallet Owner* has to fill in the form:
 - o See 'DEDICATED CASH WALLETS' details on 'managed part'
- On Behalf Client Entity ID
- Debited Dedicated Cash Wallet :
 - o <u>Role of owner</u>
 - The select wallet belongs to the (Direct) Participant itself
 - o Role of Custodian
 - The select wallet belongs to Client User
 - CBDC Payments is instructed by a Dedicated Cash Wallet custodian on behalf of a Dedicated Cash Wallet user
 - In case of a Client User Cash Wallet, the field 'On Behalf Client Entity ID' will be populated with the Client Entity Id

QUE DE FRA	NCE				
BANQUE DE FRANCE EUROSYSTÈME	DL3S 💀		Monetary strategy Financial stability		Catendar date 05-31-2024 14:09:06 Business date 05-06-2024 Business window Open for All Business window Open for All
② Dashboard	CBDC Payment > New CBDC Payment				
Dedicated Cash Wallets	New CBDC Paymen	t			
T2 accounts	PARTIES				
	CBDC Payment ID *	Instructing party name *	Instructing party BIC *	Supplementary Data	On Behalf Client Entity ID
CBDC Operations	Payment_Owned_Demo-002	PBS	PBSOFROXDLT	I5IN12	
CBDC Payments Global	Operation context *	per			
1 External network	DEDICATED CASH WALLET	rs			
4 eyes pending validation	Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet M	lanager BIC *		
路 User administration	PBS_CLI2_WALLET	▼ PBSOFR0XDLT			
Parameters	PBS_CLI1_WALLET PBS_CLI2_WALLET PBS_WALLET_001	Credited Dedicated Cash Walle	t Manager BIC *		
	TRANSFER				
	Amount *	Currency *	Payment Date *		

- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations* 4 eyes.
- You need to connect with the single user you didn't use to create the operation
- Go to 4 eyes process / CBDC Payment and click on the CBDC Payment ID just created with the previous single user
- Validate the transfer operation by clicking on the Approve button
- Go to the CBDC *Payment / owned*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".
- **Dedicated Cash Wallet owners** can control on their respective wallets that the correct amount has been credited or debited.

4.4.3 CBDC payment instructed by Client user

- The flow is the same as for a *Dedicated Cash Wallet manager or owner*
- One can access the creation file by clicking on the subtab Create a CBDC Payment subtab

BANQUE DE FRANCE Eurosystème	DL3S	QA		etary y Economic sancial stability		Calendar date 06-04-2024 09:07:12 Business date 12-31-2022 Business window Start of Day	pbs-cli1 @ PBS-CLI1 @ PB Decicated Cash Wallet User
⑦ Dashboard		CBDC Payment > New CBDC Payment					
Dedicated Cash Wallets		New CBDC Payment					
GBDC Operations		PARTIES					
CBDC Payments	Create a CBD Payment	Payment ID * n_Ci1_PBS	Instructing party name * PBS-CLI1	Instructing party BIC * OOCLI1PBSINVESTOR000001	Supplementary Data		
n Global	Used						
4 eyes pending validation		ICATED CASH WALLETS					
		Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC *				
Parameters		PBS_CLI1_WALLET •	PBSOFROXDLT				
		Credited Dedicated Cash Wallet * PBG_VALLET_001	Credited Dedicated Cash Wallet Manager BH BDFEFR2TXXX				
		TRANSFER					
		Amount * Currency	* Payr	nent Date *			
		369 EUR	12	1/31/2022			
		* Required Field					
		CANCEL SUBMIT					

• The screen is open with defaulted to 'Cross Manager' context



- Some fields are pre-filled.
- Debited Dedicated Cash Wallet :
 - The selected wallet belongs to Client User
- The *Credited Dedicated Cash Wallet Owner* has to fill in the form:
 - o Select the Credited Dedicated Cash Wallet Manager BIC in the dropdown list
 - Input Credited Dedicated Cash Wallet
 - Is to be entered manually
 - Must be the exact value of the wallet alias

BANQUE DE FRANCE EUROSYSTÈME	DL3S 💁	Monetary strategy Financial stability		Calendar date 05:31-2024 14:09:06 Business date 05:06:2024 Business window: Open for All	singleuser @ PBS Decicated Cash Wallet Owner Dedicated Cash Wallet Custodian
Ø Dashboard	<u>CBDC Payment</u> > New CBDC Payment				
Dedicated Cash Wallets	New CBDC Payment				
T2 accounts	PARTIES				
	CBDC Payment ID * Instructing pa	y name * Instructing party BIC *	Supplementary Data	On Behalf Client Entity ID	
GBDC Operations	Payment_Owned_Demo-002 PBS	PBSOFROXDLT	ISIN12		
d CBDC Payments					
🛔 Global	Operation context *				
1 External network					
4 eyes pending validation	DEDICATED CASH WALLETS				
validation	Debited Dedicated Cash Wallet * Debited Dedicate	d Cash Wallet Manager BIC *			
路 User administration	PBS_CLI2_WALLET PBSOFRoxDLT				
Parameters	PBS_CLII_WALLET Credited Dedi	ted Cash Wallet Manager BIC *			
	PBS_COL2_WALLET PBBILLXXDLT	-			
	PBS_WALLET_001				
	TRANSFER				
	Amount * Currency *	Payment Date *			
	789 EUR	5/6/2024			
	* Required Field				
	CANCEL SUBMIT				

- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations* 4 eyes.
- You need to connect with the single user you didn't use to create the operation.
 - \circ An other user of the client entity
 - \circ A user of the entity managing the client user (as a custodian)
- Go to 4 eyes process / CBDC Payment and click on the CBDC Payment ID just created with the previous single user
- Validate the transfer operation by clicking on the Approve button
- Go to the CBDC *Payment / owned*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".
- **Dedicated Cash Wallet Client user** can control on their respective wallets that the correct amount has been credited or debited.

4.4.4 Payments view

- List of payments are displayed and segregated by roles
 - \circ Owned
 - For owned asset
 - As a custodian for Client users
 - \circ Managed
 - National supervised

•



BAN	NQUE DE FRANCE Eurosystème	DL3S 💽)			Monetary strategy Financial stability	Econor			Calendar date 05-31-2 Business date 05-06-2 Business window Ope	024 De	ngleuser2 @ BDF dicated Cash Wallet Owner dicated Cash Wallet Manag
	Dashboard	CBD	C Payment									
Ó	Dedicated Cash Wallets	CB	BDC Payme	nts - man	aged						Create a C	BDC Payment
6	T2 accounts	¢	Operation ID		Acceptance Timestamp	Settlement Timestamp	Creation Date		Manager BIC debited DCW		Manager BIC Credited DCW	
₽	CBDC Operations		Payment_Demo_001	ACCEPTED	05-31-2024 12:46:42		05-06-2024	PBD_WALLET	BDFEFR2TXXX	PBR_WALLET	BDFEFR2TXXX	
₽	CBDC Payments	Create a CBDC Payment	uture_001	SETTLED	05-30-2024 19:03:43	05-31-2024 09:30:23	05-05-2024	PBS_WALLET	BDFEFR2TXXX	PBR_WALLET	BDFEFR2TXXX	
	Global	Owned	PBS	SETTLED	05-30-2024 15:05:03	05-30-2024 15:05:34	12-31-2022	PBS_WALLET	BDFEFR2TXXX	PBS_CLI1_W	PBSOFRXXDLT	
	External network	Managed	nent_001	SETTLED	05-30-2024 14:53:01	05-30-2024 14:53:35	12-31-2022	PBS_WALLET	BDFEFR2TXXX	PBD_CLI1_W	PBDEDXXXDLT	
	Reporting	National supervised										Þ
₽	4 eyes pending validation											
왕	User administration											
Ô	Parameters											

- Payment details
 - o By clicking on a specific entry, a screen will display the payment details

meline				Already Settled	
Initialized		Accepted	Settled		
05-30-2024 15:21:30		05-30-2024 15:22:36	05-30-2024 15:23:10		
BD 12-31-2022		12-31-2022	12-31-2022	1009	6
CBDC Payment ID	IDintraPaymentfromCLI1_2	Counterpart	PBS_CLI2_WALLET		Amo
Туре	PAYMENT	Amount	253	Objective	21
Status	SETTLED	Currency	EUR	Settled	2
Dedicated Cash Wallet	PBS_CLI1_WALLET	Initiator	singleuser		
		Approver	singleuser2		

- Payment integration in Cash Posting history
 - 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.
 - Payments are consolidated with other operation types

BANQUE DE FRANC EUROSYSTÈME	DL3S	QA			netary 89 inancial stability	Econom services	lic		Calendar date 05- Business date 05- Business window	06-2024	singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (*2)
		Dedicated Cash Wallets									
 Dedicated Cash Wallets 		Dedicated Cach	Mallata man	and					Crosse of	adianted Cash walls	lactive
T2 accounts	PBS		Cash postings histo	ry							×
CBDC Operations	Cash Wallet Owner BIC	PBS_WALLET_001 PBSOFRXXDLT						Date rang	ge: Start date - E	nd date 📋 C	,
CBDC Payments	Currency	EUR	Instruction ID	Operation Type	Amount	Date/Time	Counterpart ID	Counterpart wallet	Counterpart Manager BIC	Supplementary Data	untry Code
តំ Global	T2 Account Country Code	FRT2PBS001 FR	TEST_814	TRANSFER	-50	05-31-2024 09:34:18			CBLXLLXXDLT		
-	Manager BIC	BDFEFR2TXXX	PaymentFuture_001	PAYMENT	-440	05-31-2024 09:30:11	PBRBNNXXDLT		BDFEFR2TXXX	ISIN10	
n External network			ProvCli1_PBS	PAYMENT	-350	05-30-2024	PBSOFRXXDLT		PBSOFRXXDLT	ISIN11	4
Reporting			CrossPayment_001	PAYMENT	-1 200	05-30-2024			PBDEDXXXDLT	ISIN10	
4 eyes pending validation			PBS_issuing_0530_001	ISSUANCE	+14000	05-30-2024 14:33:41			CCBCNSPPXXX		
앜, User administratic							Item	s per page: 5	▼ 1 - 5 of 5		
Parameters			Balance							11960 EUR	

4.5 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

4.5.1 CBDC redemption instructed by a Dedicated Cash Wallet manager

- One needs to connect as a **Dedicated Cash Wallet manager** and to click on the Create a CBDC Operation tab in CBDC Operations tab.
- Select the type redemption. The button operation context will be automatically set to crossmanager.
- Then, one has to fill in:

	BANQUE DE FRANCE EUROSYSTEME	DL3S QA	Monetary strategy Financial stability	Economic	Calendar date 05-16-2024 10:28:10 Business date 05-11-2024 Business window Open for All	6 singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager +2	&
Ø	Dashboard	CBDC operation > New CBDC operation					
G	Dedicated Cash Wallets	New CBDC operatio	n				
6	T2 accounts	PARTIES					
₽	CBDC Operations	CBDC Operation ID * REDEEM_PBS_EUROTRANSIT_20240516	1028	Type * REDEMPTION	•		
ñ	Global	Instructing party name *		Instructing par	ty BIC *		
ň	External network	BDF		BDFEFR2TXXX			
Ø	Reporting	Operation context *	er				
₽	4 eyes pending validation						
Ø	Dashboard	DEDICATED CASH WALLETS	5				
G	Dedicated Cash Wallets	Debited Dedicated Cash Wallet *			Cash Wallet Manager BIC *		
Ó	T2 accounts	PBS_WALLET_001	•	BDFEFR2TXXX			
₽	CBDC Operations	Credited Dedicated Cash Wallet *		Credited Dedica	ted Cash Wallet Manager BIC *		
ñ	Global						
ñ	External network	TRANSFER					
Ø	Reporting	Amount *	Currency *				
₽	4 eyes pending validation	* Required Field					
8	User administration	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 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
- Amount corresponds amount of the issuance
- The following information will be automatically filled in:
 - Instructing party name, the name of the party instructing the transfer



- Instructing party BIC, the BIC of the party instructing the transfer
- 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
- Currency corresponds to the currency of the CBDC transferred
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations 4 eyes*.

	BANQUE DE FRANCE Eurosystème	DL3S QA	Innetary Sconomic Financial stability	Calendar date 05-16-2024 10 Business date 05-11-2024 Business window Open for A	Dedicate	s er @ BDF d Cash Wallet Owner d Cash Wallet Manager δ
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
G	Dedicated Cash Wallets	CBDC Operations - 4 E	yes Process			
G	T2 accounts		Owned Man	aged Issued		
₿	CBDC Operations	CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	Debited Dedicated Wallet
ñ	Global	ISSU_PBS_PBG_202405101608	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:08:48	PBS_WALLE
ñ	External network	REDEEM_PBS_EUROTRANSIT_202405161	028 REDEMPTION	WAITING_FOR_APPROVAL	05-16-2024 10:32:30	PBS_WALLE
Ø	Reporting					Þ
₽	4 eyes pending validation	Dedicated Cash Wallets				
ð	User administration	CBDC Operations				

- You need to connect with the single user you didn't use to create the operation
- Go to 4 eyes process / CBDC operations and click on the CBDC operation ID just created with the previous single user

	BANQUE DE FRANCE EUROSYSTEME	DI 35 QA	etary P Ecopomic services subiny	Calendar date 05-16-2024 10 Business date 05-11-2024 Business window Open for A	Dedicate	ser2 @ BDF d Cash Wallet Owner d Cash Wallet Manager δ
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
Ó	Dedicated Cash Wallets	CBDC Operations - 4 Ey		aged Issued		
G	T2 accounts			locueu		
₽	CBDC Operations	CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	Debited Dedicated Wallet
ñ	Global	ISSU_PBS_PBG_202405101608	TRANSFER	WAITING_FOR_APPROVAL	05-10-2024 16:08:48	PBS_WALLE
ñ	External network	REDEEM_PBS_EUROTRANSIT_2024051610	28 REDEMPTION	WAITING_FOR_APPROVAL	05-16-2024 10:32:30	PBS_WALLE
Ø	Reporting					۲
₽	4 eyes pending validation	Dedicated Cash Wallets				
න්	User administration	CBDC Operations				

• Validate the transfer operation by clicking on the *Approve* button



	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Economic Busi	endar date 05-16-2024 10:35:51 iness date 05-11-2024 iness window Open for All	singleuser2 @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager (+2)
Ø	Dashboard	4 Eyes Process > REDEEM_PBS_EUROTRANSIT_202405161028		
Ó	Dedicated Cash Wallets	4 Eyes Process		
Ó	T2 accounts	PARTIES		
₽	CBDC Operations	CBDC Operation ID * Type * REDEEM_PBS_EUROTRANSIT_202405161028 REDEMPTION	~	
ñ	Global	Instructing party name * Instructing party BIC	*	
ñ	External network	BDF BDFEFR2TXXX		
Ø	Reporting	External network *		
₽	4 eyes pending			
Ø	Dashboard	Dedicated Cash WALLETS		
G	Dedicated Cash Wallets	Debited Dedicated Cash Wallet * Debited Dedicated C	ash Wallet Manager BIC *	
G	T2 accounts	PB5_WALLET_001 BDFEFR2TXXX		
₽	CBDC Operations	Credited Dedicated Cash Wallet * Credited Dedicated C	Cash Wallet Manager BIC *	
ñ	Global			
ñ	External network	TRANSFER		
Ø	Reporting	Amount * Currency *	~	
₽	4 eyes pending validation			
ð	User administration	* Required Field BACK TO BE REVIEWED APPROVE		
ര	Parameters			

• Go to the CBDC *Operations / managed*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".

BANQUE DE FRANCE Eurosystème	DL3S QA	Monetary strategy Financial stability	Calendar date 05 Business date 05 Business window	-11-2024	singleuser2 @ BDF Dedicated Cash Wallet Ow Dedicated Cash Wallet Ma (+2)	mer nager 2
🕐 Dashboard	CBDC					
Dedicated Cash Wallets	CBDC Operatio	ons - managed		Cre	eate a CBDC Operation	
T2 accounts	Туре	•				-
CBDC Operations	CBDC Operation ID	♦ Status	🗢 Туре	 Accepted Timestamp 	Settled Timestamp	
<u>n</u> Global	REDEEM_PBS_EUROTRAN	SIT_202405161028 SETTLED	Redemption	05-16-2024 10:39:04	05-16-2024 10:39:39	

• **Dedicated Cash Wallet manager** can control that the correct amount has been credited or debited.



	BANQUE DE FRANCE Eurosystème	DL3S QA	N str	fonetary ategy Econo Financial stationy	Business d	late 05-16-2024 10:42: late 05-11-2024 vindow Open for All	18 singleuser2 Dedicated Casl Dedicated Casl +2	Wallet Owne
Ø	Dashboard	Dedicated	d Cash Walle	ts - manag	ed	Create a Dedicated C	Cash wallet	nactive
Ó	Dedicated Cash Wallets			Standa	rd Issuance			
Ó	T2 accounts					Filter		Q
₽	CBDC Operations	✦ T2 Account Reference	♦ Wallet Alias	Owner BIC	Owner Short Name	♦ Currency	Available	¢ Co
ñ	Global	DXT2PBD001	PBD_WALLET_001	PBDEDXXXDLT	PBD	EUR	75	DX
ñ	External network	DXT2PBD003	PBD_WALLET_003	PBDEDXXXDLT	PBD	EUR	0	DX
		DXT2PBD001	PBD_WALLET_XXX	PBDEDXXXDLT	PBD	EUR	0	DX
0	Reporting	FRT2PBG001	PBG_WALLET_001	PBGSGGXXDLT	PBG	EUR	10515	FR
₽	4 eyes pending validation	NNT2PBR001	PBR_WALLET_001	PBRBNNXXDLT	PBR	EUR	0	NM
	Validation	FRT2PBS001	PBS_WALLET_001	PBSOFRXXDLT	PBS	EUR	21 415	FR
2	User administration							

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

PBS		Cash postings history			×
Cash Wallet	PBS_WALLET_001		art date – End dat	e 🖬	C
Owner BIC	PBSOFRXXDLT				
Currency	EUR	Instruction ID	Operation Type	Amount	
T2 Account Country Code	FRT2PBS001 FR	REDEEM_PBS_EUROTRANSIT_202405161028	REDEMPTION	-100	
Manager BIC	BDFEFR2TXXX	dvponthefly4_RECE	DVP	-50	
		ISSU_EUROTRANSIT_PBSWALLET001_202405152000	ISSUANCE	+2 000	
		TRANSFER_PBS_PBG	TRANSFER	-150	
		Transfer_Test	TRANSFER	-30	
		Items per page: 5 ▼ 1	– 5 of 13	< > >	•

4.5.2 CBDC redemption instructed by a Dedicated Cash Wallet owner

- The flow is exactly the same as for previously described. Dedicated Cash Wallet Owner accesses the file to create a CBDC Operation by clicking on the subtab *Create a CBDC Operation*
- Select the type redemption. The operation context will be automatically set to cross-manager
- The Dedicated Cash Wallet owner has to fill in the form:



BANQUE DE FRANC EUROSYSTÈME	DL3S	QA	Monetary strategy Financial stability	Calendar date 05-16-2024 10:55: Business date 05-12-2024 Business window Open for All	31 singleuser @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian
🕐 Dashboard		CBDC operation > New CBDC operation			
Dedicated Cash Wallets	1	New CBDC operation			
T2 accounts		PARTIES			
		CBDC Operation ID *	Type *		
CBDC Operatio	ins	REDEEM_PBS_EUROTRANSIT_20240516105	REDEMPTION	•	
ក្នំ Global		Instructing party name *	Instructing party BIC *		
ក្តំ External netwo	-1-	PBS	PBSOFRXXDLT		
II External netwo	irκ	On Behalf Client Entity ID			
4 eyes pending validation	5				
路 User administr	ation	Operation context *			
Parameters		Intra manager 🧿 Cross manager			
🕐 Dashboard		DEDICATED CASH WALLETS			
Dedicated Cash Wallets		Debited Dedicated Cash Wallet *	Debited Dedicated Cash V	Vallet Manager BIC *	
T2 accounts		PBS_WALLET_001	✓ BDFEFR2TXXX		
		Credited Dedicated Cash Wallet *	Credited Dedicated Cas	h Wallet Manager BIC *	
CBDC Operation	าร	EUR_TRANSIT	CCBCNSPPXXX	in water bie	
n Global					
<u>ກິ</u> External networ	ĸ	TRANSFER			
🖨 4 eyes pending		Amount *	Currency *		
validation		50	EUR		
왔 User administra		Required Field			
Parameters		CANCEL SUBMIT			

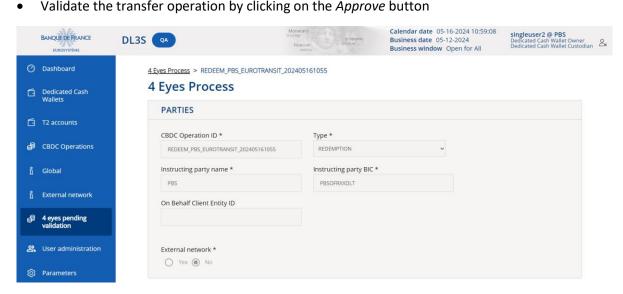
- CBDC Operation ID, it is to be unique. Commonly the form is REDEEM_debited wallet alias_credited wallet alias_date&time_. The CBDC Operation ID can only contain alphanumeric characters, hyphen and underscore. If the CBDC Operation ID is filled with another special character, an error message will appear and prevent the submission of the request.
- On behalf Client Entity ID should not be filled as the party is instructed on its own name
- 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
- Amount corresponds amount of the issuance
- The following fields will be automatically filled in:
 - o Instructing party name, the name of the party instructing the transfer
 - Instructing party BIC, the BIC of the party instructing the transfer
 - 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
 - o Currency corresponds to the currency of the CBDC transferred
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations* 4 eyes.



	BANQUE DE FRANCE Eurosystème		Monetary trategy Econo Financial strategy		-2024	singleuser @ PBS Dedicated Cash Wallet Owne Dedicated Cash Wallet Custo	er &
Ø	Dashboard	CBDC Operations - 4 Eyes Process					
Ó	Dedicated Cash Wallets	CBDC Operations - 4 Eye	es Process	d Managed			
Ó	T2 accounts		Owner	u Malayeu			
₽	CBDC Operations	CBDC Operation ID	🗢 Туре	🗢 Status	Status Timestamp	Debited Dedicated Cash Wallet	¢
ñ	Global	REDEEM_PBS_EUROTRANSIT_20240516105	REDEMPTION	WAITING_FOR_APPROVAL	05-16-2024 10:56:46	PBS_WALLET	
ñ	External network			_		ŝ	Þ
₽	4 eyes pending validation	Dedicated Cash Wallets					
8	User administration	CBDC Operations					

- You need to connect with the single user you didn't use to create the operation
- Go to 4 eyes process / CBDC operations and click on the CBDC operation ID just created with the previous single user

	BANQUE DE FRANCE Eurosysteme	DL3S 🐢		Financial Service	Calendar date 05- Business date 05- Business window	12-2024	singleuser2 @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custor	er dian (
0	Dashboard	CBDC Operations - 4	Eyes Process					
Ó	Dedicated Cash Wallets	CBDC Ope	rations - 4 Eye	s Process	ed Managed			
6	T2 accounts			- Cwil	eu manageu			
đ	CBDC Operations	CBDC Operation	ID	🗢 Туре	🗢 Status	Status Timestamp	Debited Dedicated Cash Wallet	¢
ñ	Global	REDEEM_PBS_EU	JROTRANSIT_202405161055	REDEMPTION	WAITING_FOR_APPROVAL	05-16-2024 10:56:46	PBS_WALLET	
ñ	External network						•	
₽	4 eyes pending validation	Dedicated Cash Wallets						
ജ	User administration	CBDC Operations						



NQUE DE FRANCE			
EUROSYSTÈME			
🕐 Dashboard	Dedicated Cash WALLETS		
Dedicated Cash Wallets	Debited Dedicated Cash Wallet *	Debited Dedicated Cash Wallet Manager BIC *	
T2 accounts	PBS_WALLET_001	BDFEFR2TXXX	
	Credited Dedicated Cash Wallet *	Credited Dedicated Cash Wallet Manager BIC *	
CBDC Operations	EUR_TRANSIT	CCBCNSPPXXX	
<u>n</u> Global			
n External network	TRANSFER		
a eyes pending validation	Amount * Curren	cy *	
Validation	50 Euro	~	
路 User administration	* Required Field		
() Parameters	BACK TO BE REVIEWED APPR	ROVE	

• Go to the CBDC *Operations / owned*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".

BANQUE DE FRANCE Eurosystème	DL3S 😱		onomic Busines	r date 05-16-2024 11:01 s date 05-12-2024 s window Open for All	Dedicated C	2 @ PBS ash Wallet Owner ash Wallet Custodian
🕐 Dashboard	CBDC					
Dedicated Cash Wallets	CBDC Operations - o	owned			Create a CBDC	Operation
T2 accounts	Туре 👻					
B CBDC Operations		🗢 Status	🗢 Туре	▲ Accepted Timestamp	Settled Timestamp	🗢 Creatio
ἦ Global	REDEEM_PBS_EUROTRANSIT_20240	5161055 SETTLED	Redemption	05-16-2024 11:00:21	05-16-2024 11:00:54	05-12-2

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

BANQUE DE FRANCE EUROSYSTEME	DL3S 😱		Monetary strategy Financial stability	Economic Br	alendar date 05-16-2 usiness date 05-12-2 usiness window Ope	024 D	ingleuser2 @ PBS ledicated Cash Wallet Owner ledicated Cash Wallet Custodian	
🕐 Dashboard	Dedicated Cash Wal	lets						
Dedicated Cash Wallets	Dedicated	Dedicated Cash Wallets - owned				Create a Dedicated Cash wallet Inactive		
T2 accounts					Filte	[Q	
GBDC Operations		🗢 Wallet Alias	Anager BIC	Manager Shor Name	t 🗢 Currency	Available	🗢 Country Code	
រាំ Global	FRT2PBS001	PBS_WALLET_001	BDFEFR2TXXX	BDF	EUR	21 365	FR	



PBS

Cash Wallet Owner BIC Currency T2 Account Country Code Manager BIC

Date ranį	ge: Start date –	End date	ĒC
Instruction ID	Operation Type	Amount	Date/T
REDEEM_PBS_EUROTRANSIT_202405161055	REDEMPTION	-50	05-16 11:01:
REDEEM_PBS_EUROTRANSIT_202405161028	REDEMPTION	-100	05-16 10:39
dvponthefly4_RECE	DVP	-50	05-16 10:30
ISSU_EUROTRANSIT_PBSWALLET001_202405152000	ISSUANCE	+2 000	05-15 20:13
TRANSFER_PBS_PBG	TRANSFER	-150	05-15- 15:53:
	Instruction ID REDEEM_PBS_EUROTRANSIT_202405161055 REDEEM_PBS_EUROTRANSIT_202405161028 dvponthefly4_RECE ISSU_EUROTRANSIT_PBSWALLET001_202405152000	Instruction ID Operation Type REDEEM_PBS_EUROTRANSIT_202405161055 REDEMPTION REDEEM_PBS_EUROTRANSIT_202405161028 REDEMPTION dvponthefly4_RECE DVP ISSU_EUROTRANSIT_PBSWALLET001_202405152000 ISSUANCE	Instruction IDOperation TypeAmountREDEEM_PBS_EUROTRANSIT_202405161055REDEMPTION-50REDEEM_PBS_EUROTRANSIT_202405161028REDEMPTION-100dvponthefly4_RECEDVP-50ISSU_EUROTRANSIT_PBSWALLET001_202405152000ISSUANCE+2 000

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

- The flow is exactly the same as for previously described. Dedicated Cash Wallet Custodian accesses ٠ the file to create a CBDC Operation by clicking on the subtab Create a CBDC Operation
- Select the type redemption. The operation context will be automatically set to cross-manager ٠
- One has to fill in the form: •

	BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Calendar date 05-15-2024 14:52:55 transformer Business date 05-02-2024 Princetal stationy Business window Open for All Business window Open for All	2×
Ø	Dashboard	<u>CBDC operation</u> > New CBDC operation	
Ó	Dedicated Cash Wallets	New CBDC operation	
Ó	T2 accounts	PARTIES	
₽	CBDC Operations	CBDC Operation ID * Type * REDEEM_PBSCLI1_EUROTRANSIT_202405151452 REDEMPTION	
ñ	Global	Instructing party name * Instructing party BIC *	
ñ	External network	PBS PBSOFRXXDLT On Behalf Client Entity ID	
₽	4 eyes pending validation	00CLI1PBSINVESTOR000001	
ඵ	User administration	Operation context *	
0	Parameters		

ashboard	DEDICATED CASH WAL	LETS
edicated Cash /allets	Debited Dedicated Cash Wallet	t * Debited Dedicated Cash Wallet Manager BIC *
	PBS_CLI1_WALLET	▼ PBSOFRXXDLT
2 accounts		
BDC Operations	Credited Dedicated Cash Walle	et * Credited Dedicated Cash Wallet Manager BIC *
	EUR_TRANSIT	CCBCNSPPXXX
lobal		
xternal network	TRANSFER	
eves pending	Amount *	Currency *
eyes pending alidation	10	EUR
er administration		

- *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 On behalf Client Entity ID corresponds to the LEI of the client
- 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
- Amount corresponds amount of the issuance
- The following information will be automatically filled in:
 - o Instructing party name, the name of the party instructing the transfer
 - Instructing party BIC, the BIC of the party instructing the transfer
 - 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
 - *Currency* corresponds to the currency of the CBDC transferred
- After you click on the *Submit* button, you will see the operation waiting for approval in the *CBDC Operations 4 eyes*.

	BANQUE DE FRANCE Eurosystème	DL3S 😱	EconorBusiness date	e 05-15-2024 14:57:13 si 05-02-2024 De low Open for All	ngleuser2 @ PBS edicated Cash Wallet Owner edicated Cash Wallet Custodiar
Ø	Dashboard	CBDC Operations - 4 Eyes Process			
Ċ	Dedicated Cash Wallets	CBDC Operations -	4 Eyes Process		
G	T2 accounts		Owned Managed		
đ	CBDC Operations	CBDC Operation ID	🗢 Туре	♦ Status	Status Timestamp
ň	Global	REDEEM_PBSCLI1_EUROTRANSIT	202405151452 REDEMPTION	WAITING_FOR_APPROVA	AL 05-15-2024 14:55:51
ů ů	Global External network	REDEEM_PBSCLI1_EUROTRANSIT	202405151452 REDEMPTION	WAITING_FOR_APPROVA	

• You need to connect with the single user you didn't use to create the operation

BANQUE DE FRANCE



• Go to 4 eyes process / CBDC operations and click on the CBDC operation **ID** just created with the previous single user

	BANQUE DE FRANCE Eurosystème	DL3S 🐢	Econor Bus Services	endar date 05-15-2024 14: siness date 05-02-2024 siness window Open for Al	Dedicated Cash Wa	S Illet Owner Illet Custodiar
Ø	Dashboard	CBDC Operations - 4 Eyes Process				
Ó	Dedicated Cash Wallets	CBDC Operations	- 4 Eyes Proce	SS		
Ó	T2 accounts		Owned	Manageu		
₽	CBDC Operations		🗢 Туре	🗢 Status	Status Timest	amp
ñ	Global	REDEEM_PBSCLI1_EUROTRANSI	IT_202405151452 REDEM	MPTION WAITING_FC	R_APPROVAL 05-15-2 14:55:5	
	External network					Þ
ñ	External network					

• Validate the transfer operation by clicking on the *Approve* button

	BANQUE DE FRANCE EUROSYSTÈME	35 CA Calendar date 05-15-2024 15:01:48 singleuser @ PBS Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian Cash Wallet Cus	°_x
Ø	Dashboard	Dedicated Cash WALLETS	
G	Dedicated Cash Wallets	Debited Dedicated Cash Wallet * Debited Dedicated Cash Wallet Manager BIC *	
	T2 accounts	PBS_CLI1_WALLET PBSOFR0XDLT	
₽	CBDC Operations	Credited Dedicated Cash Wallet * Credited Dedicated Cash Wallet Manager BIC * EUR_TRANSIT CCBCNSPPXX	
ň	Global		
ñ	External network	TRANSFER	
₽	4 eyes pending validation	Amount * Currency *	
8	User administration	* Required Field	
٢	Parameters	BACK TO BE REVIEWED APPROVE	

• Go to the CBDC *Operations / managed*, the transfer appears with the "ACCEPTED" status at first until it is "SETTLED" or "UNSETTLED".

BANQUE DE FRANCE EUROSYSTÈME	DL3S QA Monetary stategy Financial stategy	Econor Business of	date 05-15-2024 15:04:1 late 05-02-2024 vindow Open for All	3 singleuser @ F Dedicated Cash V Dedicated Cash V	Vallet Owner O
🕐 Dashboard	CBDC				
Dedicated Cash Wallets	CBDC Operations - mana	Create a CBDC Operation			
T2 accounts	Туре 🗸				
B CBDC Operations		♦ Status	🗢 Туре	▲ Accepted Timestamp	Settlee Times
n Global	REDEEM_PBSCLI1_EUROTRANSIT_2024051514	52 SETTLED	Redemption	05-15-2024 15:02:17	05-15- 15:02:!

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



BANQUE DE FRANCE EUROSYSTÉME	DL3S 💁	strategy EconorBus	endar date 05-15-2 iness date 05-02-2 iness window Ope	024 Dedicate	i ser @ PBS ed Cash Wallet Owner & & ed Cash Wallet Custodian	
🕐 Dashboard	Dedicated Cash Wallets					
Dedicated Cash Wallets	Dedicated Ca	ash Wallets - manag	Create	a Dedicated Cash wallet	Inactive	
T2 accounts			Filt	er	Q	
BCBDC Operations	Wallet ID		✦ T2 Account Reference	🗢 Wallet Alias	🗢 Manager BIC	
ĥ Global	erG9nHeQcnsNgMBb	zHPymEQfWsmyS3pscm5Fpw0UGes=	FRT2PBS001	PBS_CLI1_WALLET	PBSOFRXXDLT	
	y050AQWdGKJ5gSLZY	/fmhdf/tFLvF5KEa28boVOKm3Xw=	FRT2PBS001	PBS_CLI2_WALLET	PBSOFRXXDLT	
្បំ External network					•	
PBS					×	
105		Cash postings history	,			
Cash Wallet	PBS_CLI1_WALLET	Date range: Start date – End da			d date 🖬 C	
Owner BIC	PBSOFRXXDLT		Start date - Lind date			
Currency	EUR	Instruction ID		Opera	ation Type Amount	
T2 Account	FRT2PBS001	REDEEM PBSCLI1 EUR	OTRANSIT 202	2405151452 RED	EMPTION -10	
Country Code	FR					

4.6 Monitoring and reporting

PBSOFRXXDLT

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.

REDEEM_PBSCLI1_EUROTRANSIT

TRANSFER_PBSCLI1_PBGCLI1_202405101726

TRANSFER_PBG_PBGCLI1_202405101720

REDEMPTION -10

-10

+100

TRANSFER

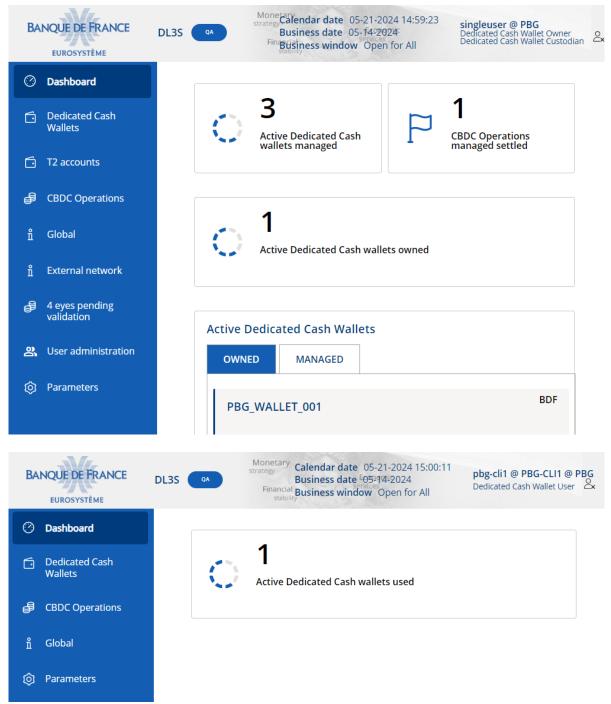
TRANSFER

4.6.1 Monitoring

Manager BIC

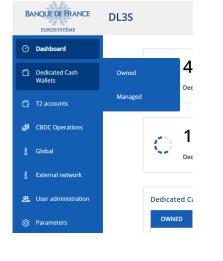
• The number and the list of Dedicated Cash Wallets owned or managed are available on the dashboard. In case of a *Dedicated Cash Wallet user*, only the number of Dedicated Cash Wallets used is available.





• 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 - owned	ł								Create	a Dedicated Cash wall	et Inactive
									R		۹
Wallet ID	T2 Account Reference	Wallet Alias	Manager BIC	Manager Short Name	¢ Currency	¢ Available	Country Code	Token Details	Valid From	Valid To	Blocking status
V6tsFvP4a47dDPt4Bgm252vjLFOnHaqWwhVQ20NIYMQ=	FRT2PBG001	PBG_WALLET_001	BDFEFR2TXXX	BDF	EUR	10520	FR	See Details	01-01-2022		

• Information available are:

Dedicated Cash Wallets

- 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 (on managed view)
- *Owner Short Name* corresponds to the name of the owner of the Dedicated Cash Wallet in DL3S (on managed view)
- *Manager BIC* corresponds to the BIC of the manager of the wallet (on owned view)
- *Manager Short Name* corresponds to the name of the manager of the Dedicated Cash Wallet in DL3S (on owned view)
- 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 corresponds to the business date on which the wallet is active
- Valid to corresponds to the business date on which the wallet is expired
- Blocking Status corresponds to the status of the wallet blocked or unblocked
- By clicking on the wallet alias, the participant has access to the cash postings 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 postings histor							
Cash Wallet	PBG_WALLET_001	cash postings histor	у				Date ra	ange: Start date – En	d date 💼 C
Owner BIC	PBGSGGXXDLT						Datera	plande - En	
Currency	EUR	Instruction ID	Operation Type	Amount	Date/Time	Counterpart ID	Counterpart wallet	Counterpart Manager BIC	Supplementary Data
T2 Account	FRT2PBG001	DvPPBGPBS_DELI	DVP	+5	05-17-2024				
Country Code	FR				16:19:56				
Manager BIC	BDFEFR2TXXX	dvponthefly5_DELI	DVP	+50	05-16-2024 10:40:09				
		dvponthefly4_DELI	DVP	+50	05-16-2024 10:30:16				
		TRANSFER_PBS_PBG	TRANSFER	+150	05-15-2024 15:53:48	PBSOFRXXDLT		BDFEFR2TXXX	
		PBG_Redemption	REDEMPTION	-5	05-14-2024 19:41:28			CCBCNSPPXXX	
							tems per page: 5	▼ 1 - 5 of 12	I< < > >I

х

10 520 EUR

4.6.2 Reporting

- An operation can have different status:
 - Settled: the operation is successful

Balance

- o 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.

BANQUE DE FRANCE EUROSYSTÈME	DL3S 💀	Monetary strategy Financial stability	Calendar date 05-21-2024 15:06:41 Business date 05-14-2024 Business window Open for All	singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager 2 (+2)
⑦ Dashboard				
Dedicated Cash Wallets	Loading Active Dedicated Cash wallets managed	CBDC Operations managed sett	tled	
T2 accounts				
GBDC Operations				
<u>n</u> Global	Active Dedicated Cash wallets owned	31960 € Statal outstanding amount		
n External network				
Reporting				
4 eyes pending validation	Active Dedicated Cash Wallets OWNED MANAGED			
路 User administration				
Parameters				

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

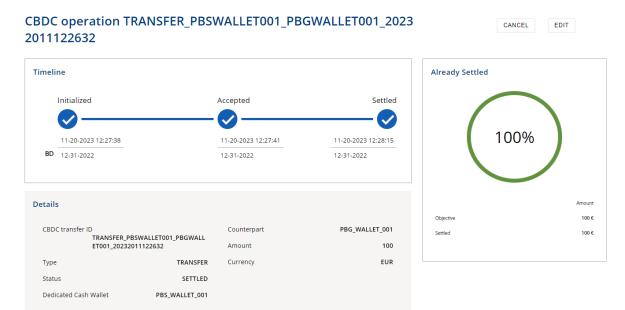


CBDC Operations - managed

Create a CBDC Operation

CBDC Operation ID		¢ Type	 Accepted Timestamp 	Settled Timestamp	Creation Date	Debited Dedicated Cash Wallet	Manager BIC debited DCW	Credited Dedicated Cash Wallet	Manager BIC Credited DCW	Amount	Currency
redeem_unsettled	UNSETTLED	Redemption	05-16-2024 14:51:22	05-16-2024 14:51:48	05-12-2024	PBG_WALLET	BDFEFR2TXXX	EUR_TRANSI	CCBCNSPPXXX	50 0 00	EUR
REDEEM_PBS_EUROTRANSIT_202405161055	SETTLED	Redemption	05-16-2024 11:00:21	05-16-2024 11:00:54	05-12-2024	PBS_WALLET	BDFEFR2TXXX	EUR_TRANSI	CCBCNSPPXXX	50	EUR
REDEEM_PBS_EUROTRANSIT_202405161028	SETTLED	Redemption	05-16-2024 10:39:04	05-16-2024 10:39:39	05-11-2024	PBS_WALLET	BDFEFR2TXXX	EUR_TRANSI	CCBCNSPPXXX	100	EUR
TRANSFER_PBS_PBG	SETTLED	Transfer	05-15-2024 15:53:27	05-15-2024 15:54:00	05-02-2024	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	150	EUR
PBG_Redemption	SETTLED	Redemption	05-14-2024 19:40:55	05-14-2024 19:41:28	05-02-2024	PBG_WALLET	BDFEFR2TXXX	EUR_TRANSI	CCBCNSPPXXX	5	EUR
DCWOwner_Transfer	SETTLED	Transfer	05-14-2024 19:29:40	05-14-2024 19:30:23	05-02-2024	PBG_WALLET	BDFEFR2TXXX	PBB_WALLET	CBLXLUXDLT	15	EUR
Transfer_Test	SETTLED	Transfer	05-14-2024 18:05:51	05-14-2024 18:06:26	05-02-2024	PBS_WALLET	BDFEFR2TX000	PBG_WALLET	BDFEFR2TXXX	30	EUR
PBS_Transfer	SETTLED	Transfer	05-14-2024 17:50:14	05-14-2024 17:50:49	05-02-2024	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	55	EUR
TRANSFER_PBG_PBGCLI1_202405101720	SETTLED	Transfer	05-10-2024 17:21:49	05-10-2024 17:22:22	04-11-2023	PBS_WALLET	BDFEFR2TXXX	PBS_CLI1_W	PBSOFRXXDLT	100	EUR
TRANSFER_PBS_PBG_202405101643	SETTLED	Transfer	05-10-2024 16:53:09	05-10-2024 16:53:44	01-09-2023	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	100	EUR
TRANSFER_PBS_PBG_202405101611	SETTLED	Transfer	05-10-2024 16:18:44	05-10-2024 16:19:18	01-09-2023	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	150	EUR

- 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
- Settled timestamps corresponds date and time when the operation has been settled or unsettled
- 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:



- 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 Supervision

4.7.1 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 active Dedicated Cash Wallets supervised are available on the dashboard.

BAI	NQUE DE FRANCE EUROSYSTÈME	DL3S QA Monetary strategy Financial stability Calendar date 05-21-2024 15:08:07 Business Window Open for All Stability Business Window Open for All Stability	ER her hager 🔗
Ø	Dashboard		
Ō	Dedicated Cash Wallets	Active Dedicated Cash wallets owned	
G	T2 accounts		
₽	CBDC Operations		
ñ	Global	23 Active Dedicated Cash wallets 22 CBDC Operations supervised settled	
ñ	External network	supervised	
Ø	Reporting		
₽	4 eyes pending validation	Active Dedicated Cash Wallets OWNED MANAGED SUPERVISED	
8	User administration	NCBISSUER	
Ø	Parameters	EUR_TRANSIT	

 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 💽			Economic			Calendar date 05-2 Business date 05-1 Business window 0	4-2024	singleuser @ NCE Dedicated Cash Walk Dedicated Cash Walk *2
⑦ Dashboard	Dedicated Cash Wallets								
Dedicated Cash Wallets	Dedicated Cash Wallets - super	vised							Inactive
			Standar	d Issuance					
CBDC Operations							Figer		Q
🖞 Global	Wallet ID	T2 Account Reference	Wallet Alias	Manager BIC	Manager Short Name	Currency	Available	Country Coo	le Token
n External network	x+QQ9vL5WoZ1j6YBLt5A7OybuFFlgCWh45b6qlBvu2E=	FRT2PBG001	PBG_CLI1_WALLET	PBGSGGXXDLT	PBG	EUR	7	FR	See Dr
External network	woGnT+ObbNwU50MUDbjD3b8ZXn71wHBiwlG/9a3ik5o=	FRT2PBG001	PBG_CLI2_WALLET	PBGSGGXXDLT	PBG	EUR	3	FR	See De
Reporting	vr6kPn95BHguW7+ojvIPwCP2CDD0qgYyPDF2XBTH0AE=	FRT2PBG001	WALLET_PBG_CLI4	PBGSGGXXDLT	PBG	EUR	0	FR.	See Dr
	erG9nHeQcnsNgMBbzHPymEQfWsmyS3pscm5Fpw0UGes-	FRT2PB5001	PBS_CLI1_WALLET	PBSOFRXXDLT	PBS	EUR	70	FR	See De
4 eyes pending validation	witMobjC0LD3TV+E89wKBKQKI9UPjuGgVEY8W]jypwi=	FRT2PBS001	PBS_CLI1_WALLET002	PBSOFRXXDLT	PBS	EUR	0	FR	See De
	y050AQWdGKJ5gSLZYfmhdf/tFLvF5KEa28boVOKm3Xw=	FRT2PB5001	PBS_CLIZ_WALLET	PBSOFRXXDLT	PBS	EUR	0	FR	See De
8 User administration	vx3RD4qxtSyOz0axqryowUzUWJPnUnMh/SMfrGpcblU=	CST2CONS001	EUR_TRANSIT	CCBCNSPPXXX	NCBISSUER	EUR	-52 000	CS	See De
	VJvYBpJE6SAmvab8Foo1ptosc//8nlXOtNu5Pzv6Xoo=	LLT2PBB001	CUSTODIAN_WALLET	CBLXLLXXDLT	CBL	EUR	0	LL	See De
Parameters	45y+gcUyvHOyhi+r3n+OY66egeciqCJznF9pc12V/IM=	LLT2PBB001	PBB_WALLET_001	CBLXLUXXDLT	CBL	EUR	9965	LL	See De
	qP4y9IJI8sAfRiqSxKnWQ8/rNUrq2E47CcUgvaE73X0=	LLT2PBB001	PBB_WALLET_002	CBLXLLXXDLT	CBL	EUR	0	LL	See De

- 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
- 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.

PBG		Cash postings histor							
Cash Wallet	PBG_WALLET_001	cash postings histor	y				-		
Owner BIC	PBGSGGXXDLT						Da	te range: Start date – E	ind date 💼 C
Currency	EUR	Instruction ID	Operation Type	Amount	Date/Time	Counterpart ID	Counterpart wallet	Counterpart Manager BIC	Supplementary Data
T2 Account	FRT2PBG001	DvPPBGPBS_DELI	DVP	+5	05-17-2024 16:19:56				
Country Code	FR								
Manager BIC	BDFEFR2TXXX	dvponthefly5_DELI	DVP	+50	05-16-2024 10:40:09				
		dvponthefly4_DELI	DVP	+50	05-16-2024 10:30:16				
		TRANSFER_PBS_PBG	TRANSFER	+150	05-15-2024 15:53:48	PBSOFRXXDLT		BDFEFR2TXXX	
		PBG_Redemption	REDEMPTION	-5	05-14-2024 19:41:28	CCBCNSPPXXX	EUR_TRANSIT	CCBCNSPPXXX	
							Items per page:	5 💌 1 – 5 of 12	IC < > >I
		Balance							10 520 EUR

4.7.2 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 DL	_3S 💁				Financial stability	Ect senis	nomic ⁴⁶			Busi	nder dete 05-21-2024 13-5 ness date 05-14-2024 ness window Open for All	5:57 gingleuser @ 807 Deficited Can Walet D Deficited Can Walet M
3 Dashboard	CBDC											
Dedicated Cash Wallets	CBDC Operations - nationa	I supervis	ed								Create a	CBDC Operation
3 T2 accounts	Туре - С											
F CBDC Operations	CEDC Operation ID	Status	¢ Type	- Accepted Timestamp	Settled Timestamp	Creation Date	Debited Dedicated Cash Wallet	Manager BIC debited DCW	Credited Dedicated Cash Wallet	Manager BIC Credited DCW	Amount	Currency
	whethe	SETTLED	Transfer	05-21-2024 12:05:16	05-21-2024 12:06:51	05-14-2024	PBG_CU1_W	PEGSGGXXDLT	PBG_CLI2_W	PBGSGGXXDLT	3	BUR
Global	redeem_unsettled	UNSETTLED	Redemption	08-16-2024 14:51:22	05-16-2024 14:51:48	05-12-2024	PEG_WALLET	BDPEPR2TXXX	EUR_TRANSI	CCBCNS#PXXX	50000	BUR .
External network	REDEEM_PES_EUROTRANSIT_202405161055	SETTLED	Redemption	05-16-2024	05-16-2024	05-12-2024	PBS_WALLET	BDFEFR2TXXX	EUR_TRAND	CCBCNSPPXXX	50	EUR:
Reporting	REDEEM_PES_EUROTRANSIT_202405161028	SETTLED	Redemption	05-16-2024	05-16-2024	05-11-2024	PES_WALLET	BDFEFR2TXXX	EUR_TRANSL.	CCBCNSPPXXX	100	BuR .
a 4 eyes pending	TRANSFER, PBS, PBS	SETTLED	Transfer	05-15-2024	05-15-2024	05-02-2024	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	150	EUR
velidation	REDEEM_PESCU1_EUROTRANSIT_202405151462	SETTLED	Redemption	05-15-2024	05-15-2024	05-02-2024	PBS_CUIT_W	PBSOFRXOLT	EUR_TRANS	CCBCNSPPXXX	10	EUR
User administration	REDEEM_RESCUIT_BURGTRANSIT	SETTLED	Redemption	05-15-2024	05-15-2024	05-02-2024	PBS_CLI1_W	PESOFROXDLT	EUR_TRANSI	CCBCNSPRXXX	10	BUR
Parameters	PBG_Redemption	SETTLED	Redemption	05-14-2024	05-14-2024	05-02-2024	PBG_WALLET	BDFEFR2TXXX	EUR_TRANSI_	CCBCNSPPXXX	5	BUR
	DCWDisner_T/ansfer	SETTLED	Transfer	05-14-2024	05-14-2024	09-02-2024	PBG_WALLET	BDFEFR2TXXX	PBE_WALLET_	CBUXLUNDLT	15	EUR
	Transfer_Test	SETTLED	Transfer	05-14-2024	05-14-2024	05-02-2024	PBS_WALLET	BDFEFR2TXXX	PBG_WALLET	BDFEFR2TXXX	30	BUR
	PBS_Transfer	SETTLED	Transfer	05-14-2024	05-14-2024	05-02-2024	PES_WALLET.	BDFEFR2TXXX	PBG_WALLET	EDFEFR2TXXX	55	EUR
	TRANSFER_PESCUIT_PEGCUIT_202405101726	SETTLED	Transfer	17:50:14 05-10-2024 17:58:50	17:50:49 05-10:2024 17:39:23	04-12-2023	PBS_CLI1_W	PESOFROIDLT	PBG_CU1_W	PEGSGGKKDLT	10	EUR
	TRANSPER_PBG_PBGCLI1_202405101720	SETTLED	Transfer	17:38:50 05-10-2024 17:21:49	17:39:23 05-10-2024 17:22:22	04-11-2029	PBS_WALLET	BDFEFR2TXXX	PBS_CU1_W	PESOFRIXIDLT	100	EUR
	TRANSPER PES PEG 202405101643	SETTLED	Transfer	17:21:49 05-10-2024 16:52:09	17:22:22 05-10-2024 16:53:44	01-09-2023	PBS_WALLET	BD#E#82TXXX	PBG_WALLET	EDFEFR2TXXX	100	EUR
	TRANSFER PES PEG 202405101611	SETTLED	Transfer	16:52:09	16:53:44 05-10-2024	01-09-2023	PBS_WALLET	BDFEFR2TXX	PBG_WALLET	BDFEFR2TXXX	150	6.5

- 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:

			and the second			
BANQUE DE FRANCE EUROSYSTÈME	DL3S	s		Economic ervices	Calendar date 11-20-2023 14:28:35 Business date 12:31-2022	singleuser @ BDF Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager & (+2)
⑦ Dashboard	CBDC operation > REDEEM_PBSWAL	LET001_EURTRANSIT_2023201113502	23			
Dedicated Cash Wallets	CBDC operation R	EDEEM_PBSWALLE	T001_EURTRANS	SIT_20232011135023	CA	NCEL EDIT
T2 accounts						
BDC Operations	Timeline				Already Settled	
n Global	Initialized		Accepted	Settled		
ាំ External network	11-20-2023 13:51:23		11-20-2023 13:51:26	11-20-2023 13:51:47	100	%
② Reporting	BD 12-31-2022		12-31-2022	12-31-2022		
Parameters						
	Details					Amount
	CBDC transfer ID REDEEM_P 201113502	BSWALLET001_EURTRANSIT_2023	Counterpart	EUR_TRANSIT	Objective	50 €
	Туре	REDEEM	Amount	50	Settled	50 C
	Status	SETTLED	Currency	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

4.8 Data extraction

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

4.8.1 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.

	BANQUE DE FRANCE EUROSYSTÈME	DL3S 🔍	Monetary strategy Financial stability		Calendar date 05-16-2024 Business date 05-12-2024 Business window Open for		singleuser2 @ B Dedicated Cash Wa Dedicated Cash Wa (+2)	DF llet Owner llet Manager	2
Ø	Dashboard	Reporting > CBDC operations extraction							
		CBDC operations ext	tracti	on					
Ċ	Dedicated Cash Wallets	OPTIONS							
G	T2 accounts	Туре		Status		Creation o	date		
₽	CBDC Operations	All	~	All	~	5/12/202	24 – 5/12/2024		
ñ	Global	Settlement Business date 5/12/2024 – 5/12/2024							
ñ	External network	WALLETS							
Ø	Reporting								
4	4 eyes pending	Participants		T2 account refere					
82	validation	All	~	All	~				
8	User administration	Country code		Wallet(s)					
	User administration	All	~		•				
Ø	Parameters								
2	User administration	CANCEL DATA EXTRACTION	N						

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

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

BANQUE DE FRANCE
EUROSYSTÈME

OPTIONS		
Туре	Status	Creation date
All	✓ All	✓ 5/12/2024 – 5/12/2024
AII TRANSFER ISSUANCE REDEMPTION		
WALLETS		
Participants	T2 account reference	
All	✓ All	~
Country code	Wallet(s)	
All	~ ~	

CANCEL DATA EXTRACTION

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

C	OPTIONS				
Т	уре		Status		Creation date
	All	~	All	~	5/12/2024 - 5/12/2024
S	ettlement Business date 5/12/2024 – 5/12/2024 💼		AII ACCEPTED SETTLED UNSETTLED		
۷	VALLETS				
	articipants All	•	T2 account reference All	~	
C	Country code All	~	Wallet(s)		

CANCEL

DATA EXTRACTION

- Business date of the operation

BANQUE DE FRANCE
EUROSYSTÈME

OPTIONS		
Туре	Status	Creation date
All	All	✓ 5/12/2024 – 5/12/2024
Settlement Business date		
5/12/2024 - 5/12/2024		MAY 2024 👻 <
		S M T W T F
WALLETS		MAY 1 2 3
Participants	T2 account reference	5 6 7 8 9 10
All	✓ All	 ✓ 12 13 14 15 16 17
Country code	Wallet(s)	19 20 21 22 23 24
All	 ✓ 	26 27 28 29 30 31

CANCEL DATA EXTRACTION

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

OPTIONS		
Type All Settlement Business date	Status All ~	Creation date 5/12/2024 – 5/12/2024
5/12/2024 - 5/12/2024		
WALLETS		
Participants All All BDF CBL NCBISSUER	T2 account reference	
PBB PBD PBE PBG PBR PBS		

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

BANQUE DE FRANCE
EUROSYSTÈME

OPTIONS					
Type	~	Status	~	Creation date 5/12/2024 – 5/12/2024	Ē
Settlement Business date 5/12/2024 – 5/12/2024 💼					
WALLETS					
Participants	~	T2 account reference	~		
All	~	All All DXT2PBD001 DXT2PBD003 DXT2PBD007 FRT2PBG001			
CANCEL DATA EXTRACTION		FRT2PBS001 NNT2PBR001 SquashTest3 TestSquash TestSquash2			

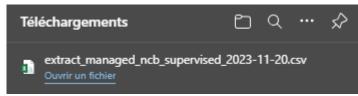
- Country code. It is possible to filter on the country code of participants involved in CBDC Operations

OPTION	S			
AII AT BE CS CY DE DX EE ES EU FI FR GR HR IE IT LL LT LU LV AII		Status All T2 account reference All Wallet(s)	Creation dat 5/12/2024	e - 5/12/2024
CANCEL	DATA EXTRACTION			

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

OPTIONS		
Туре	Status	Creation date
All	✓ All	✓ 5/12/2024 - 5/12/202
Settlement Business date 5/12/2024 – 5/12/2024	PBG_CLI1_WALLET	
	PBG_CLI2_WALLET	
WALLETS	WALLET_PBG_CLI4	
Participants	PBS_CLI1_WALLET	
All	► PBS_CLI1_WALLET0	~

- 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 CBDC Operation ID
 - o CBDC Operation type
 - o Debited Dedicated Cash Wallet
 - o Debited Dedicated Cash Wallet Owner BIC
 - o Debited Dedicated Cash Wallet Manager BIC
 - o 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



i A	В	C D	E	F	G	н	1	J	К	L	M	N	0	P	Q	R	S
CBDC O	perat CBDC Oper	at Debited CBD Debited C	BD Debited CBD D	ebited Co	u Debited T2/0	Credited	CBI Credited CE	Credited CBI	redited Co	Credited T2/	Amount	Currency	Status (last	s Last status B	Last status T	imestamp	
issuanc	e_PB ISSUANCE	EUR_TRANSIT	CBCONSPPXXX			PBG_WA	LLET PBGSGGXXI	BDFEFR2TXX	R	FRT2PBG001	150000.00	EUR	SETTLED	31/12/2022	2023-11-15 0	9:55:37 +000	9 UTC
issusan	ce -pl ISSUANCE	EUR_TRANSIT	CBCONSPPXXX			PBS_WA	LLET PBSOFRXXD	LBDFEFR2TXX	R	FRT2PBS001	1000.00	EUR	SETTLED	31/12/2022	2023-11-20 0	9:22:29 +000	0 UTC
ISSUAN	CE_P ISSUANCE	EUR_TRANSIT	CBCONSPPXXX			PBS_WA	LLET PBSOFRXXD	L BDFEFR2TXX	R	FRT2PBS001	234000.00	EUR	SETTLED	31/12/2022	2023-11-15 0	9:55:42 +000	а итс
issuanc	e_EU ISSUANCE	EUR_TRANSIT	CBCONSPPXXX			PBS_WA	LLET PBSOFRXXD	BDFEFR2TXX	R	FRT2PBS001	2000.00	EUR	SETTLED	31/12/2022	2023-11-20 1	0:29:01 +000	0 UTC
redeem	_pbg REDEEM	PBG_CLI1_W PBGSGGX	XDI PBGSGGXXDI FF	1	FRT2PBG001	EUR_TRA	NSIT	CBCONSPPXX	< Contract of the second secon		50.00	EUR	SETTLED	31/12/2022	2023-11-20 1	3:05:06 +000	о ОТС
trnasfe	_pbg TRANSFER	PBG_CLI1_W PBGSGGX	XDI PBGSGGXXDI FF	1	FRT2PBG001	PBS_WA	LLET PBSOFRXXE	L BDFEFR2TXX	R	FRT2PBS001	10.00	EUR	SETTLED	31/12/2022	2023-11-20 1	2:46:21 +000	о UTC
transfe	_pbg TRANSFER	PBG_WALLET PBGSGGX	XDIBDFEFR2TXX FF	1	FRT2PBG001	PBB_WA	LLET_001	CBLXLLXXDLT			13500.00	EUR	SETTLED	31/12/2022	2023-11-15 1	2:46:02 +000	υυτс
transfe	_pbs TRANSFER	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	2	FRT2PBS001	PBG_WA	LLET PBGSGGXXI	BDFEFR2TXX	R	FRT2PBG001	45000.00	EUR	SETTLED	31/12/2022	2023-11-15 1	2:46:50 +000	о итс
transfe	pbs_TRANSFER	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	PBB_WA	LLET_001	CBLXLLXXDLT			1200.00	EUR	SETTLED	31/12/2022	2023-11-15 1	2:47:24 +000	0 UTC
TRANSF	ER_P TRANSFER	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	PBG_WA	LLET PBGSGGXXI	BDFEFR2TXX	R	FRT2PBG001	100.00	EUR	SETTLED	31/12/2022	2023-11-20 1	1:28:15 +000	о ОТС
REDEEN	PBS REDEEM	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	2	FRT2PBS001	EUR_TRA	NSIT	CBCONSPPXX	ĸ		200.00	EUR	SETTLED	31/12/2022	2023-11-20 1	3:01:23 +000	0 UTC
REDEEN	PBS REDEEM	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	EUR_TRA	NSIT	CBCONSPPXX	ĸ		50.00	EUR	SETTLED	31/12/2022	2023-11-20 1	2:51:47 +000	ουтс
BD_CLC	SURE REDEEM	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	EUR_TRA	NSIT	CBCONSPPXX	< Contract of the second secon		2156.00	EUR	SETTLED	31/12/2022	2023-11-16 1	7:36:40 +000	о итс
5 tt	TRANSFER	PBG_WALLET PBGSGGX	XDI BDFEFR2TXX FF	1	FRT2PBG001	PBG_CLI	1_W PBGSGGXXI	PBGSGGXXDI	R	FRT2PBG001	100.00	EUR	SETTLED	31/12/2022	2023-11-20 1	2:42:47 +000	0 UTC
i transfe	_pbg TRANSFER	PBG_WALLET PBGSGGX	XDI BDFEFR2TXX FF	1	FRT2PBG001	PBS_WA	LLET PBSOFRXXD	L BDFEFR2TXX	R	FRT2PBS001	15000.00	EUR	SETTLED	31/12/2022	2023-11-15 1	2:45:38 +000	0 UTC
BD_CLC	SURE REDEEM	PBG_WALLET PBGSGGX	XDI BDFEFR2TXX FF	2	FRT2PBG001	EUR_TRA	NSIT	CBCONSPPXX	ĸ		169908.00	EUR	SETTLED	31/12/2022	2023-11-16 1	7:36:37 +000	υτс
зπ	TRANSFER	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	PBS_CLI	_W PBSOFRXXD	PBSOFRXXDL	R	FRT2PBS001	100.00	EUR	SETTLED	31/12/2022	2023-11-20 1	1:34:02 +000	0 UTC
transfe	-pbs TRANSFER	PBS_WALLET PBSOFRX	KDL BDFEFR2TXX FF	1	FRT2PBS001	PBG_WA	LLET PBGSGGXXI	BDFEFR2TXX	R	FRT2PBG001	150.00	EUR	SETTLED	31/12/2022	2023-11-20 1	1:21:45 +000	ουтс

4.8.2 Cash postings history extraction

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

DL3S Operator can extract cash postings history for every participant of DL3S.

Reporting > Cash postings history extraction

Cash	postings	history	vextraction

Туре		Settlement business date	
All	~	5/14/2024 - 5/14/2024	
WALLETS Participants		T2 account reference	
All	~	All	~
Country code		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

Туре		Settlement business date			
All	~	12/31/2022 - 12/31/2022	ē		
AII TRANSFER ISSUANCE REDEEM DVP					
Participants		T2 account reference			Country code
All	~	All		~	All
Wallet(s)					
CANCEL DATA EXTR	ACTION				



OPTIONS											
Туре		v	Settler			ess d		Ē			
/ 111		•	12/0	11202		2.017	2022	2			
WALLETS			DE	EC 20	23 🔻			<	>		
			s	Μ	Т	W	Т	F	S		
Participants			DEG	2				1	2	Country code	
All		~	3	4	5	6	7	8	9	► All	
Wallet(s)			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 movements from.

OPTIONS	
Туре	Settlement business date
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 PBS					

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

Туре		Settlement business date			
All	~	12/31/2022 - 12/31/2022			
WALLETS					
Participants		T2 account reference		Country code	
All	~	All	~	All	
Wallet(s)	•	All DXT2PBD001 FRT2GS001 FRT2PBG001 FRT2PBS001 NNT2PBR001			
CANCEL	AEXTRACTION	DXT2PBD001 FRT2CS001 FRT2PBG001 FRT2PBS001 NNT2PBR001			



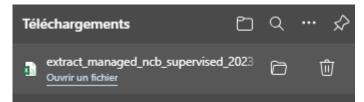
- Country code. It is possible to filter on the country code of participants involved in movements

		AT
OPTIONS		BE CS CY
Type All	 ✓ 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 cash postings.

OPTIONS	
Type	Settlement business date ✓ 12/31/2022 – 12/31/2022
PBG_CLI1_WALLET_ PBG_CLI2_WALLET_	
PBS_CLI1_WALLET_I PBS_CLI1_WALLET_I	T2 account reference Country code All All
PBS_CLI2_WALLET_I	
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
 - o Dedicated Cash Wallet
 - Dedicated Cash Wallet Owner BIC
 - o Dedicated Cash Wallet Manager BIC
 - Country Code



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

K1		f _x Counter	oart CBDC Wallet mar	nager BIC													
4	A	В	с	D	E	F	G	н	1	J	к	L	м	N	0	P	
		Movement Type		CBDC Wallet						rpart Counterpart			Currency	Status	Settlemen	t Timestamp	
	trnasfer_pbgcli1wallet001_pt		TRANSFER	PBG_CLI1_WALLET_001	PBGSGGXXDI	PBGSGGXXDI FR		FRT2PBG001	PBS_WA	ALLET PBSOFRXXDL	BDFEFR2TXX	10.00	EUR	SETTLED	2023-11-20	12:46:28 +000	DO UTC
	tt	Credit	TRANSFER	PBG_CLI1_WALLET_001	PBGSGGXXDI	PBGSGGXXDIFR		FRT2PBG001	PBG_W	ALLET PBGSGGXXD	BDFEFR2TXX	100.00	EUR	SETTLED	2023-11-20	12:42:47 +000	00 UTC
	redeem_pbgcli1wallet001_eu	Debit	REDEEM	PBG_CLI1_WALLET_001	PBGSGGXXDI	PBGSGGXXDI FR		FRT2PBG001	EUR_TR	ANSIT	CBCONSPPX	50.00	EUR	SETTLED	2023-11-20	13:05:08 +000	00 UTC
	π	Credit	TRANSFER	PBS_CLI1_WALLET_005	PBSOFRXXDL	PBSOFRXXDL FR		FRT2PBS001	PBS_W/	ALLET PBSOFRXXDL	BDFEFR2TXX	100.00	EUR	SETTLED	2023-11-20	11:34:02 +000	00 UTC
	transfer_pbg_pbb	Debit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBB_W/	ALLET_001	CBLXLLXXDL	13500.00	EUR	SETTLED	2023-11-15	12:46:02 +000	00 UTC
	transfer_pbb_pbg	Credit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBB_W/	ALLET_001	CBLXLLXXDL	13408.00	EUR	SETTLED	2023-11-15	12:44:12 +000	00 UTC
	transfer_pbs_pbg	Credit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBS_WA	ALLET PBSOFRXXDL	BDFEFR2TXX	45000.00	EUR	SETTLED	2023-11-15	12:46:39 +000	00 UTC
	TRANSFER_PBSWALLET001_P	Credit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBS_WA	ALLET PBSOFRXXDL	BDFEFR2TXX	100.00	EUR	SETTLED	2023-11-20	11:28:03 +000	DO UTC
ĺ	issuance_PBG	Credit	ISSUANCE	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	EUR_TR	ANSIT	CBCONSPPX	150000.00	EUR	SETTLED	2023-11-15	09:55:48 +000	00 UTC
	tt	Debit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBG_CL	11_W PBGSGGXXD	PBGSGGXXD	100.00	EUR	SETTLED	2023-11-20	12:42:47 +000	00 UTC
	transfer_pbg_pbs	Debit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBS_W/	ALLET PBSOFRXXDL	BDFEFR2TXX	15000.00	EUR	SETTLED	2023-11-15	12:45:27 +000	00 UTC
	transfer-pbswallet001_pbgwa	Credit	TRANSFER	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	PBS_WA	ALLET PBSOFRXXDL	BDFEFR2TXX	150.00	EUR	SETTLED	2023-11-20	11:21:33 +000	00 UT
	BD_CLOSURE_3572720a-198a-	Debit	REDEEM	PBG_WALLET_001	PBGSGGXXDI	BDFEFR2TXX FR		FRT2PBG001	EUR_TR	ANSIT	CBCONSPPX	169908.00	EUR	SETTLED	2023-11-16	17:36:25 +000	00 UT
	transfer_pbs_pbg	Debit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBG_W	ALLET PBGSGGXXD	BDFEFR2TXX	45000.00	EUR	SETTLED	2023-11-15	12:46:39 +000	00 UT(
	transfer pbs_pbb	Debit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBB_W/	ALLET_001	CBLXLLXXDL	11200.00	EUR	SETTLED	2023-11-15	12:47:24 +000	00 UT
	TRANSFER_PBSWALLET001_P	Debit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBG_W	ALLET PBGSGGXXD	BDFEFR2TXX	100.00	EUR	SETTLED	2023-11-20	11:28:03 +000	00 UT
	trnasfer_pbgcli1wallet001_pb	Credit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBG_CL	11_W PBGSGGXXD	PBGSGGXXD	10.00	EUR	SETTLED	2023-11-20	12:46:28 +000	00 UT
	issusance -pbs2	Credit	ISSUANCE	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR_TR	ANSIT	CBCONSPPX	1000.00	EUR	SETTLED	2023-11-20	09:22:41 +000	00 UT
	transfer_pbb_pbs	Credit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBB_W/	ALLET_001	CBLXLLXXDL	14356.00	EUR	SETTLED	2023-11-15	12:44:39 +000	00 UT
	ISSUANCE_PBS	Credit	ISSUANCE	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR_TR	ANSIT	CBCONSPPX	234000.00	EUR	SETTLED	2023-11-15	09:55:48 +000	00 UTC
	transfer_pbg_pbs	Credit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBG_W	ALLET PBGSGGXXD	BDFEFR2TXX	15000.00	EUR	SETTLED	2023-11-15	12:45:27 +000	00 UTC
	Π	Debit	TRANSFER	PBS WALLET 001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBS CLI	1 W. PBSOFRXXDI	PBSOFRXXD	100.00	EUR	SETTLED	2023-11-20	11:34:02 +000	00 UTC
	transfer-pbswallet001_pbgw	Debit	TRANSFER	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	PBG_W	ALLET PBGSGGXXDI	BDFEFR2TXX	150.00	EUR	SETTLED	2023-11-20	11:21:33 +000	00 UTC
	issuance EURTRANSIT PBSW	Credit	ISSUANCE	PBS WALLET 001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR TR	ANSIT	CBCONSPPX	2000.00	EUR	SETTLED	2023-11-20	10:29:11 +000	00 UT
	REDEEM_PBSWALLET001_EUR	Debit	REDEEM	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR_TR	ANSIT	CBCONSPPX	200.00	EUR	SETTLED	2023-11-20	13:01:13 +000	00 UT
	REDEEM_PBSWALLET001_EUR	Debit	REDEEM	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR_TR	ANSIT	CBCONSPPX	50.00	EUR	SETTLED	2023-11-20	12:51:50 +000	00 UTC
	BD_CLOSURE_7136729c-ab17-	Debit	REDEEM	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001	EUR_TR	ANSIT	CBCONSPPX	2156.00	EUR	SETTLED	2023-11-16	17:36:37 +000	00 UT
	Trade-htlc-pbs-pbb-secret-15	Debit	DVP	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001				-5000.00	EUR	SETTLED	2023-11-15	11:09:28 +000	00 UTO
	Trade-htlc-pbs-pbb-secret-16	Debit	DVP	PBS WALLET 001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001				-50000.00	EUR	SETTLED	2023-11-16	15:30:30 +000	00 UT
	Trade-htlc-pbs-pbb-secret-16	Debit	DVP	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001				-50000.00	EUR	SETTLED	2023-11-16	15:32:32 +000	00 UT
	Trade-htlc-pbs-pbb1511_REC	Debit	DVP	PBS_WALLET_001	PBSOFRXXDL	BDFEFR2TXX FR		FRT2PBS001				-100000.00	EUR	SETTLED	2023-11-15	11:02:46 +000	00 UT
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4																	
ć																	

4.9 Blocking and unblocking of participant

4.9.1 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

4.9.1.1 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	Roles	Valid From	Valid To	# Blocking Status
BDFEFR2TXXX	BIC	BDF	FR	Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer National CBDC Supervisor	01-01-2022 🖍	1	
CBDEDXXXDLT	BIC	CBD	DX	National CBDC Supervisor	01-01-2022 🖍	1	
CBLXLLIXIDLT	BIC	CDL.	u	Dedicated Cash Wallet Owner Dedicated Cash Wallet Manager CBDC Issuer National CBDC Supervisor	01-01-2022 🖍	1	
CCBCNSPPIOO	віс	NCBISSUER	G	Dedicated Cash Waltet Owner Dedicated Cash Waltet Manager CIDIC Issuer CIDIC Supervisor	01-01-2022 🖍	1	
0	BIC	ESSAJ	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		DL35 Operator	01-01-2022 🖍	1	
PBBILLXXDLT	BIC	PBB	u	Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian	01-01-2022 🖍	1	â
PBDEDXXXDLT	BIC	PBD	DX	Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian	01-01-2022 🖌	1	ê
PBEILLXXDLT	BIC	PBE	ш	Dedicated Cash Wallet Owner	01-01-2022 🖍	1	ê
PBGSGGXXDLT	BIC	PBG	FR	Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian	01-01-2022 🖍	1	ð
PBRBNNXXDLT	BIC	PDR	NN	Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian	01-01-2022 🖍	1	ô
PBSOFROIDLT	BIC	PBS	FR	Dedicated Cash Wallet Owner Dedicated Cash Wallet Custodian	01-01-2022 🖍	1	ê



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

\$ Easity ID	\$ Туре	\$ Short Name	+ Country Code	Roles	Valid From	Valid Te	Blocking Status
00CL11PBBINVESTOR0000001	4 4)pr	PBB-CLI1	2 County Coos	Dedicated Cash Wallet User	01-01-2022		÷ BRCHIQ SHIM
00CLI2PBBINVESTOR0000002	LCI	PBB-CL12		Dedicated Cash Wallet User	01-01-2022 🖍	1	â
00CLI1PBDINVESTOR0000001	LD .	PBD-CLI1		Dedicated Cash Wallet User	01-01-2022 🖍	1	a
00CLI2PBDINVESTOR0000002	LD	PBD-CLI2		Dedicated Cash Wallet User	01-01-2022 🖍	1	8
00CLI1PBRINVESTOR0000001	LD	PBR-CL11		Dedicated Cash Wallet User	01-01-2022 🖍	1	e
00CLI2PBRINVESTOR0000002	LD	PBR-CL12		Dedicated Cash Wallet User	01-01-2022 🖍	1	8
00CLI1PBGINVESTOR00000001	un	PBG-CLH		Dedicated Cash Wallet User	01-01-2022 🖌	1	۵
00CLI2PBGINVESTOR00000002	ιD	PBG-CLI2		Dedicated Cash Wallet User	01-01-2022 🖌	1	ê
00CLI1PBSINVESTOR000001	w	PBS-CLI1		Dedicated Cash Wallet User	01-01-2022 🖍	1	8
00CLI2PBSINVESTOR000002	LEI	PB5-CLI2		Dedicated Cash Wallet User	01-01-2022 🖌	1	8

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

4.9.1.2 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. Create a Dedicated Cash wallet Inactive

Dedicated Cash Wallets - managed

Wallet ID	T2 Account Reference	Wallet Alian	Owner BIC	‡ Owner Short Name	¢ Currency	Available	Country Code	Token Details	Valid From	Valid To	Contraction Contractica Con
hfLyv9iqyh3ceaCVX343LtEFdrd5Yy6mQ4sE1Q02onig-	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/ldkVoqmEQdio9RsIFX0FuCVUgdbaOEwcL7T8GI=	FRT2PBG001	PBG_WALLET4	PBGSGGXXDLT	PBG	EUR	0	FR	See Details	02-02-2024 🖌	02-15-2024 🖌	
ZIX5GB7D8s/tOIOtLWKpBJEsBnQmouhPghoExWZi7JQ-	FRT2PBG001	PBG_WALLETS	PBGSGGXXDLT	PBG	EUR	0	FR	See Details	02-03-2024 🖌	1	
dn5EhaDjCjml54VJ1uc+8w6dfYg3l4/2i1Q/tor5M3M-	FRT2PBR001	PBR_WALLET	PBRBNNXXDLT	PBR	EUR	0	NN	See Details	01-16-2024 🖌	05-07-2024 🖌	
J3sMOgBlAgv9q/6wxaLcaP3505H27v91wTzz+tYjZh0-	FRT2PBS001	PBS_WALLET	PBSOFRXXDLT	PBS	EUR	4900	FR	See Details	01-16-2024 🖌	02-13-2024 🖌	
HT3TjT8z9ZlG6/gmMh+RoGpJ7AKhuLZguUNaeY5DenQ-	FRT2PBS001	PBS_WALLET2	PBSOFRXXDLT	PBS	EUR	0	FR	See Details	01-18-2024 🖌	02-21-2024 🖌	
III633jZ7xbK7eLJIebMDI2PrHnqftpKmxuannin1DU-	FRT2PBS001	TEST_WALLET_PBS	PBSOFRXXDLT	PBS	EUR	0	FR	See Details	02-05-2024 🖌	02-09-2024 🖌	

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.

4.9.2 Blocking of a participant

4.9.2.1 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.

4.9.2.2 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.

Blocking client
Proceed to $block$ the client PBS-CLI2 (00CLI2PBSINVESTOR000002)?
This 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.
Confirm Cancel

After the confirmation, the participant status is "blocked" and it's owned DCW are "blocked".

4.9.2.2.1 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.

New Dedicated Cash Wallet

PERIMETI	ER							2/7/2024	Ē	Valid To	Ē
	ash Wallet Type * d 🔵 Issuance	Dedicated Cash PBD_WALLET2	Wallet Alias *		Client Name * PBD			Currency * Euro		~	
T2 Account re FRT2PBD001		•									
▲ Given the pa	articipant status, th	e dedicated cash	wallet will be block	ed.							
Dedicated C	ash Wallets -	managed							Create a	Dedicated Cash w	allet Inactive
					Standa	rd Issuance					
		Wallet Alias	• Owner BIC	Owner Short Name	+ Currency	¢ Available	Country Code	Token Details	Valid From	Valid To	Blocking status
Q4sE1Q02onig=	FRT2PBD001	PBD_WALLET	PBDEDXXXDLT	PBD	EUR	0	DX	See Details	01-16-2024 🧪	1	Blocked
U55nnZhsF84do=	FRT2PBD001	PBD WALLET2	PBDEDXXXDLT	PBD	EUR	0	DX	See Details	02-07-2024	1	Blocked

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

4.9.2.2.2 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

CBDC operation > New CBDC operation

	_			
DC Operation ID *	Type *		Instructing party name *	Instructing party BIC *
transfer_PBD_blocked	TRANSFER		BDF	BDFEFR2TXXX
ternal network *				
) Yes 🖲 No				
EDICATED CASH WALLET	79			
EDICATED CASIT WALLET	15			
bited Dedicated Cash Wallet *	Debited De	dicated Cash Wallet Manager I	BIC *	
PBD_WALLET	BDFEFR2T	XXX		
edited Dedicated Cash Wallet *	Credited De	dicated Cash Wallet Manager	BIC *	
PBS_WALLET	BDFEFR2T	XXX		
RANSFER				
nount *	Currency *			
5	Euro	~		
ired Field				
PBD_WALLET" is blocked, the oper	ration will not be eligible for :	settlement		
NCEL SUBMIT				
submission of tl				

Type 🔹										
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
transfer_PBD_blocked	UNSETTLED	Transfer	02-06-2024 14:44:06	02-07-2024	PBD_WALLET	BDFEFR2TXXX	PBS_WALLET	BDFEFR2TXXX	5	EUR

4.9.3 Unblocking of a participant

4.9.3.1 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.

4.9.3.2 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
ô
â

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.

BI	oc	king	cl	ient	

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 it's 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

BANQU	E DE FRANCE Rosystème							
	BANQUE DE FRANCE EUROSYSTÈME	DL3S	QA		Monetary strategy Financial stability	Economic services	Calendar date 05-21-2024 15:15:01 Business date 05-14-2024 Business window Open for All	singleuser @ Operato DL3S Operator
	🕑 Dashboard		Parameters					
	Dedicated Cash Wallets		Parameters					
	T2 accounts		Business Day	05-14-2024				
	CBDC Operations		Business Window	Open for All 🥖	,			
	ាំ Global		Time Lock	240				
	្ពំ External network							
	Reporting					CBDC full redemption		
	4 eyes pending validation							
	路 User administration							
	🙃 Parameters							

5.1.1 CBDC Full Redemption

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 QA		Monetary strategy Financial stability	Economic services	Calendar date 05-21-2024 15:15:45 Business date 05-14-2024 Business window End of Day	singleuser @ Operato DL3S Operator 🖉
🕐 Dashboard	Parameters					
Dedicated Cash Wallets	Parameters					
T2 accounts	Business Day	05-14-2024 🖍				
GBDC Operations	Business Window	End of Day 🖌				
ាំ Global	Time Lock	240				
n External network						
Reporting				CBDC full redemption		
4 eyes pending validation						
路 User administration						
Parameters						

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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:

BA	NQUE DE FRANCE EUROSYSTÈME	DL3S 🐢		Monetary strategy Financial stability	Economic services	Calendar date 05-21-2024 15:16:20 Business date 05-14-2024 Business window End of Day	singleuser @ Operator DL3S Operator
Ø	Dashboard	Parameters					
G	Dedicated Cash Wallets	Business Wi	ndows				
6	T2 accounts	Start of Day	09:00				
₽	CBDC Operations	Open for All	09:30 ↓				
ñ	Global	End of Day	15:00 ↓				
ñ	External network	Closed	21:30				
Ø	Reporting	CANCEL	IBMIT				
₽	4 eyes pending validation						
ෂ	User administration						
٢	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 external network part (3.3).

5.4 Data Extraction

The DL3S Operator can extract CBDC Operation and cash postings history for every participant on DL3S. See Data extraction section previously described (4.7).

6 Annexes

6.1 Annex 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

BDF Service description external / v1.6



Level 3 - NCB participating to DL3S with an active role: 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.

6.2 Annexe 2: Keycloack

6.2.1 Overview

Keycloack is an instance allowing the managing of user apart from DL3S. It is an Identity and Access Management solution. It provides functionalities such as user authentication, authorization, centralised user management for application and services, in this case dedicated to DL3S.

6.2.1.1 Keycloack roles

Roles	Creation mode			Business rules						
	Config.	Keycloak	DL3S UI	Scope	Create User	Grant Admin	Manage the realm			
Super admin	Yes	Yes	No	All realms*	Yes	Yes	Yes			
Admin	Yes	Yes	No	One realm	Yes	Yes	No			
Regular user	Yes	Yes	Yes	One realm	No	No	No			
External user	Yes	Yes	Yes	One realm	No	No	No			
Technical user	Yes	Yes	No	One realm	No	No	No			

Keycloack enables to grant several types of roles described below:

Super admin: It has **highest level of privileges**, including the ability to manage users, roles, clients, and all other administrative settings **over its Keycloak instance**. *The super admin has access to all realms in his instance*. *However, in the current setup we only have one realm per instance*. *There can be as many super admins as there are instances. A super admin can manage all realms within its instance*.

Admin: It has administrative privileges over its realm: manage users and certain roles. The Admin user is a user type that can be given to a payment bank for instance. It allows the creation and the handling of users within the same entity. *An Admin can only manage its realm.*

Regular user: It has **limited permissions**: can use Keycloak to authenticate itself and access the platform with its assigned roles and permissions.

External user: It has **limited permissions** and can use Keycloak to authenticate itself and execute HTLC operations.

Technical user: It is employed by applications/services to interact with other organizations services

6.2.1.2 Keycloak administration - additional information

In this party, one will find several information on keycloack which is divided in realm and instance. It is to be noted that an admin role can only be given using Keycloack.

 Realm in Keycloak: represents a security domain where identities, applications, and their configurations are managed. Each realm has its own users, roles, groups, authentication settings,



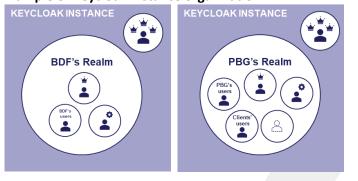
and client applications. Realms are often used to isolate different applications or parts of an application for security and administrative purposes.

- For example we could have separate realms based on user types: regular user for Payment Bank, regular user for Clients, external users, etc. Each realm contains its own set of users, roles, and applications, and admin of one realm can't access or manage resources in another realm, only the super admin does.
- **Instance in Keycloak:** refers to an individual installation or deployment of the Keycloak server. Each instance of Keycloak can host one or more realms. They handle authentication requests, manage user sessions, and enforce security policies for the realms hosted on them.
- For example, DL3S has multiple Keycloak instances deployed for different organizations (one for BDF, PBG, CBL, etc.) to ensure isolation, customization, etc. Only the super admin is able to manage a Keycloak instance
- Currently There is one keycloak instance per org, on each instance, we have at least one super admin
- Admin and DL3S UI: It is not possible to assign the admin role directly via the DL3S UI. Existing admins come from the instance configuration, and are not assigned manually. New users created via the UI, e.g. singleuser3 for BDF, will only have a simple user role by default. To assign the admin role, you need to use Keycloak from an admin account.
- *Manage the realm:* In the current implementation, for each Keycloak instance we have a Master realm and a realm for the entity (e.g. PBG).
 - The Master realm is only used to create and manage super admins and realms within the instance.
 - The super admin is in the master realm and has full rights to manage the master realm and the PBG realm.
 - The admin, on the other hand, is restricted to its realm (here PBG realm), where he can only manage users and administer certain roles (only the roles he owns).

On each instance, we have one master realm and one realm that manages all the users > However, in the current setup we only have one realm per instance as the master realm is a particular realm. **Business rules**:

			Roles			Business rules			
Participant type	Sup. Admin	Admin	Reg. User	Ext. User	Tech. User	Scope	Create User	Grant Admin	
NCB	Yes	Yes	Yes	TBD	Yes	One realm	Yes	Yes (Keycloak only)	
Payment Banks	Yes	Yes	Yes	Yes	Yes	One realm	Yes	Yes (Keycloak only)	
Clients	No	No	Yes	No	Same as its custodian	Same as its custodian	No	No	

Example of Keycloak instance organization





6.2.2 Add an Admin with KEYCLOAK

To assign admin role, one need to use Keycloack and follow the following steps:

- 1. Connected as existing PBG admin on Keycloak interface: Select the internal-users/admin
 - groups to grant singleuser2 as Super User (admin role)

				0	admin 🔻	
PBG •	Email verified ③	No No				
Manage Clients	General		Jump to section			
Client scopes	Username *	singleuser4	General			- 1
Realm roles	Email	singleuser4@pbg.eu				
Users						
Groups	Company *	PBG				
Sessions	First name					
Events						
	Last name					
Configure	Entite ID	PBGSGGXXDLT				
Realm settings	Entity ID *	PBOSOGAADEI				
Authentication	Block Access	PBG				
Identity providers	Organisation *		_			
User federation	Groups 💿	/internal-users/admins × Join Groups				

2. Connected as existing PBG admin on Keycloak interface: Click on role mapping & then "Assign role" to add the Super User role on the custodian domain

				🕑 admin 🕶 🦲
PBG -	Users > User details singleuser4			Enabled Action -
Clients Client scopes Realm roles			Unassign	1-1 - < >
Users Groups	Name default-roles-cb1	Inherited False	Description \${role_default-roles}	
Sessions Events				1-1 - < >
Configure Realm settings				
Authentication				
User federation				

3. Connected as existing PBG admin on Keycloak interface: Click on "Filter by Clients" and search the "realm-admin role" (*Super User role*)



())IKEYCLO	Assign roles to singleuser4	×	admin •
	▼ Filter by clients ▼ Q. Search by role name →	21-28 - < >	Ac
	Name	Description	
	realm-management query-users	\${role_query-users}	
	realm-management realm-admin	\${role_realm-admin}	1-1 *
	realm-management view-authorization	\$[role_view-authorization]	
	realm-management view-clients	\${role_view-clients}	
	realm-management view-events	\$[role_view-events]	
	realm-management view-identity-providers	\${role_view-identity-providers}	1 -
	realm-management view-realm	\${role_view-realm}	
	realm-management view-users	\${role_view-users}	
		21-28	
	Assign Cancel		

4. Logout as PBG admin and login as singleuser2. Singleuser2 is now a super user (admin role)

		0	singleuser2	- (
PBG Manage Clients Client scopes Realm roles Users Groups	Welcome to PBG				
Sessions Events Configure	menu items in the left navigation bar.				
Realm settings Authentication					
Identity providers User federation					

6.2.3 Add and manage a user with KEYCLOAK

One can add a user using DL3S UI. It is also possible thanks to Keycloack following the steps described below:

6.2.3.1 Login

• Open the Keycloak Administration Console and Connect as existing admin

auth.pbe.pilotv0.qa.cloud	bdf.fr		
	WEYCLOAK		
	Welcome to Keycloak		
	Administration Console >	Documentation > User Guide, Admin REST API and Javadocs	🔯 Keycloak Project >
			Mailing List >
			渝 Report an issue >
BDF Service description	external / v1.6	134	



	Sign in to your account	
U	Jsername or email	
F	assword	
		۲
	Sign In	

• Click on the upper left drop down menu and select your organization or master (default)

		2
Р	BG	-
í	PBG	~
ľ	master	
	Create Realm	

6.2.3.2 Add a user

• Click on the Users field on the left to focus on the users

PBG •
Manage
Clients
Client scopes
Realm roles
Users
Groups
Sessions
Events

• Click on the Add user button

BDF Service description external / v1.6



Users are the users in the current realm. Lea	arn more 🔀
▼ Default search ▼	→ Add user Delete user
Username	Email
pbg-dap	pbg@dap.eu
singleuser	singleuser@pbe.eu
singleuser2	singleuser2@pbe.eu

• Switch the Email verified button to Yes if you don't want the email to be verified (on the proper email address you will enter) otherwise if you want the user to be verified by receiving a mail on his address let the Email verified button on No.

Users > Create user	
Create user	
Required user actions	Select action •
Email verified ③	Ves Yes
General	Jump to section
Username *	General
Email	
Company *	
First name	
Last name	
Entity ID *	
Block Access Organisation *	
Groups 💿	Join Groups

- Enter the Username (usually the first part of the mail), and enter Email
- Click on the Join Groups button to select the group you want to add to the user
- Finalize the user creation by clicking on the Create button

You should see a green pop up on the upper right side of your screen



	0	admin 🖣	
The user has been created			×

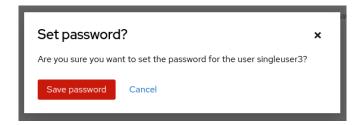
- 6.2.3.3 Setting the password
- Click on the Credentials tab (on the right of details)
- Click on Set password button

														0		admi	in 🔻		
ers ≯ Userd	etails																		
ngleusei	·3														Enabled	ł	Action	•	
Details	Credentials	Role mapping	Groups	Consents	Identity provider links	Sessions													
						C													
						No crede	entia	als											
					This user does not have an	credentials.	s. You	ı can	i set p	assword	for this	user.							
						Set pass	sword	ł											
						Credential	al Rese	et											

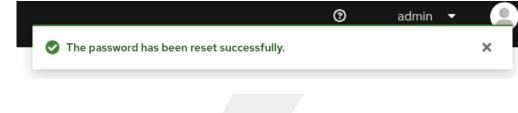
• Enter the password and password confirmation fields

Set password for singleuser3						
Password *		0				
Password confirmation *		0				
Temporary 💿	Off					
Save Cancel						

- Switch Off the Temporary button if you want this password to be definitive otherwise switch it On if you want the user to set its own password
- Click the Save button and after confirm again by clicking on the Save password button



If everything is good you should see a success message in the pop-up on the upper right side of your screen





-

-

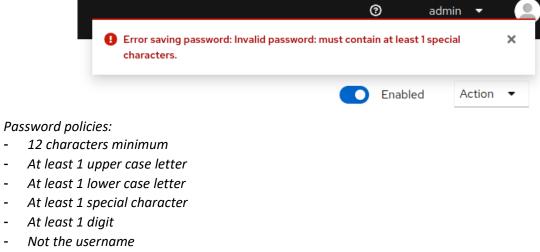
-

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-

Otherwise, if your password does not meet the required policy you may see an error in a pop-up on the upper right side of your screen explaining the issue



Not the email -

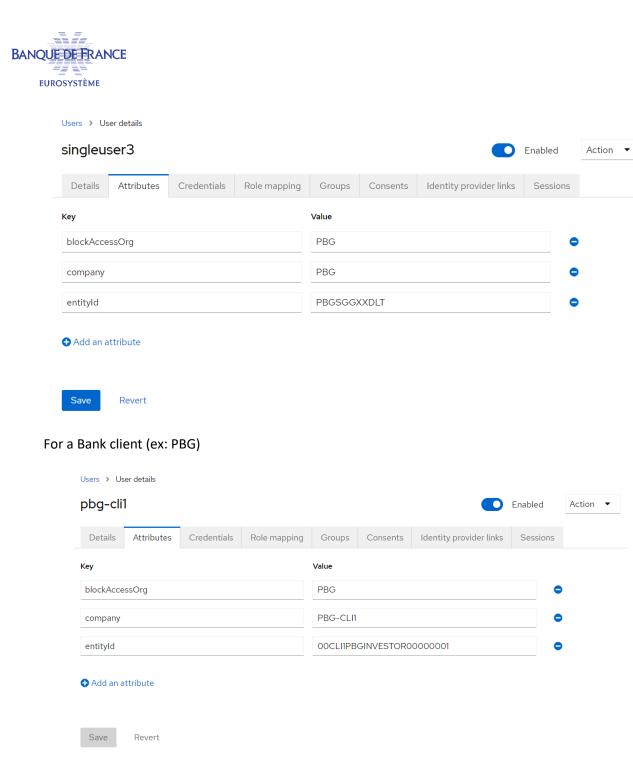
Attributes gestion 6.2.3.4

In the Attributes tab of the user add the attributes fields by clicking on the Add an attribute button ۲

Users > User o	letails									
singleuse	r3							nabled	Action	•
Details	Attributes	Credentials	Role mapping	Groups	Consents	Identity provider links	Sessions			
No attributes have been defined yet. Click the below button to add attributes, key and value are required for a key pair. • Add an attribute										
Save	Revert									

Complete as follow the Key and Value fields (copy and past the attributes of a similar user) : ٠

For a Bank user (ex: PBG)

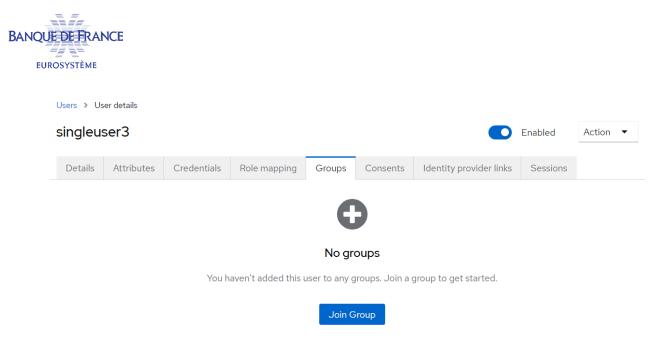


• Save the attributes by clicking on the Save button

6.2.3.5 Groups

• In the Groups tab of the user add the existing Group by clicking on the Join Group button

For a Bank user (ex: PBG)



In the **Join Groups** pop up window tick the **internal-users** group and click on the **Join** button (*tick the same group of a similar user*)

		Join gi	roups for u	sersing	lleuser3		×		
		Q Sea	arch for groups	\rightarrow	1-	3 🕶 🔇	>		
		ext	ernal-networks						
		ext	ernal-participants						
		✓ inte	ernal-users						
					1-3	• < >			
		Join							
		0011							
Client u	ser (ex: Pl	 BG)							
	ser (ex: Pl	BG)							
Client u Users > Us pbg-cli	er details	BG)						Enabled	Action
Users > Us	er details	BG) Credentials	Role mapping	Groups	Consents	Identity provide	er links	Enabled	Action
Users → Us pbg-cli	eer details 3		Role mapping	Groups	Consents	Identity provide	er links		Action
Users → Us pbg-cli	eer details 3		Role mapping	Groups	Consents	Identity provide	er links		Action
Users → Us pbg-cli	eer details 3		Role mapping	Groups		Identity provide	er links		Action
Users → Us pbg-cli	eer details 3	Credentials	Role mapping	C No gr	oups				Action

In the Join Groups pop up window tick the external-participant group and click on the Join button (*tick the same group of a similar user*)



J	oin groups for user	pbg∙	-cli3				×
	Q Search for groups	\rightarrow		1-3 💌		<	>
	external-networks						
	 external-participants 						
	internal-users						
				1-3 🔻	<	>	

6.2.3.6 Role mapping

• In the Role mapping tab of the user add the roles by clicking on the Assign role button

For a Bank user (ex: PBG)

Users > User details							
singleuser3						Enabled	Action 🝷
Details Attributes	Credentials	Role mapping	Groups	Consents	Identity provider links	Sessions	
Q Search by name	\rightarrow \checkmark	Hide inherited roles	Assign	role Un	assign	1-	1 ▼ 〈 →
Name		Inherited		Descri	ption		
default-roles-cb1		False		\${role_	_default-roles}		1
						1-1 •	< > >

• Tick all the roles as follow and click the Assign button (*tick the same role of a similar user*)

Assign roles to singleuser3

T	Filter by realm roles 🔹	Q Search by role name	\rightarrow	1-8 • 〈 〉			
√	Name			Description			
✓	accountManagementService	/admin		Manage account service			
✓	globalRegistryService/admin			Manage global registry service			
 Image: A start of the start of	identityProviderService/adm	in		Service to manage users through the use of IDP			
✓	linkBusinessService/admin			Manage link business service			
✓	offline_access			\${role_offline-access}			
✓	requestValidationService/admin			Manage request validation service			
✓	settlementManagementService/admin			Manage settlement service			
✓	uma_authorization			\${role_uma_authorization}			

1-8 👻 <



• You will get this view of assigned roles ;

singleuser3		C Enabled Action	•	
Details Attributes Credentials	Role mapping Group	s Consents Identity provider links Sessions		
Q Search by name Hide in	herited roles Assign	Tole Unassign 1-9 -	< >	
Name	Inherited	Description		
requestValidationService/admin	False	Manage request validation service	:	
settlementManagementService/admin	False	Manage settlement service	:	
globalRegistryService/admin	False	Manage global registry service	:	
accountManagementService/admin	False	Manage account service	:	
offline_access	False	\${role_offline-access}	:	
default-roles-cb1	False	\${role_default-roles}		
identityProviderService/admin	False	Service to manage users through the use of IDP		
linkBusinessService/admin	False	Manage link business service		
uma_authorization	False	\${role_uma_authorization}	:	

For a Client user (ex: PBG)

• No roles are needed to be assigned, keep the default setting as follow:

Users > User details							
pbg-cli3						Enabled	Action 💌
Details Attributes	Credentials	Role mapping	Groups	Consents	Identity provider links	Sessions	
Q Search by name	→ ∨ H	ide inherited roles	Assign	role Un	assign	1-	1 ▼ < →
Name		Inherited		Descri	ption		
default-roles-cb1		False		\${role_	default-roles}		1
						1-1 🔻	< >
DF Service descript	ion external	/ v1.6				14	2



×



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).

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.



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:

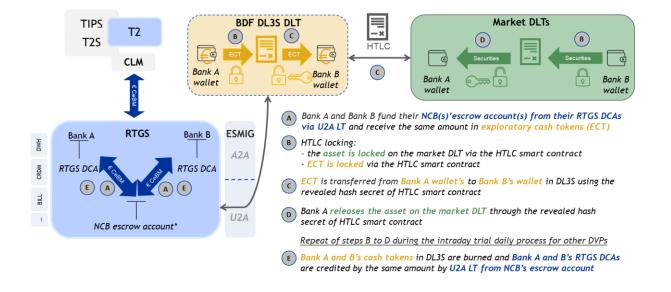
- At the start of trials, Payment banks on DLT fund their wallets in the DL3S DLT from their RTGS DCA to each participant's local NCB RTGS escrow accounts, thereby transferring ownership of these funds to their local NCB.
- Once confirmation is received that the funds have been credited to each of the 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).

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

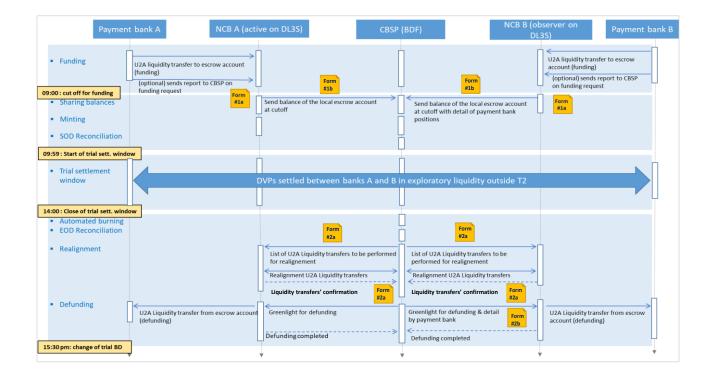


4. Settlement process in trials step by step









BANQUE DE FRANCE EUROSYSTÈME

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 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.

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

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.

Level 2 - NCB participating to DL3S with an observer role

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



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.

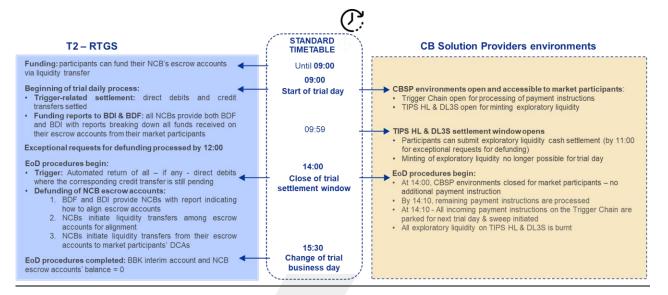
Steps B to D can be repeated during the trial intraday process for the settlement of other technical DVPs.

- 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 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:

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.



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		



TEMPLATE REPORTS FOR ESCROW PROCESS

Please use the attached model forms [click here for a download from the ECB's website]

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
Click or tap to enter a date.

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 trialsPurpose: 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.

Business date	Click or tap to enter a date.	
Instructing Solution Provider	Choose an item.	
BDF Service description external / v1.6	153	

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.

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
