

Question: 12. TBD I M P O R T A N T How could a CBDC provide privacy to consumers without providing complete anonymity and facilitating illicit financial activity?

[Return to CBDC Benefits, Risks, and Policy Considerations](#)

Question

[Return to Top](#)

How could a CBDC provide privacy to consumers without providing complete anonymity and facilitating illicit financial activity?

Answer

[Return to Top](#)

See the answers to the section [45_privacy](#) and to the answer to [q04](#).

The simplest way to achieve this would rely on the existing intermediary financial institutions to continue to do what they already do in terms of [Privacy](#), [National Security](#), and [International Security](#) BUT with the addition of the ability to use a real-time U.S. CBDC transfer mechanism instead of only the existing [Automated Clearing House \(ACH\) Network](#).

In essence, it would mean adding a parallel transaction network to the ACH Network handling the real-time transactions requirements of the U.S. CBDC. This requires the:

- Development of a U.S. CBDC is probably based on Stablecoin Model.
- Use of an energy-efficient Consensus Algorithm
- Development of a bridge between the existing ACH Network and the new U.S. CBDC Network
- Development of a new standardized [Application Programming Interface \(API\)](#) to connect the outside world to the newly enhanced combined ACH Network and CBDC Network for the existing intermediaries to use for transfers

Note: The API could be in the form of Web Services, Remote Procedure Calls (RPC), [Common Object Request Broker Architecture \(CORBA\)](#), [Data Distribution Service \(DDS\)](#) or other interprocess communication mechanisms defined using [ISO/OMG Interface Definition Language \(IDL\)](#), [standardized Web Services Interface Language \(WSDL\)](#), etc.

Figure 1 provides a very simplistic overview of how a Dual ACH/CBDC network might work. The intention is to build onto the existing financial system already in place but to allow an option to use a U.S. CBDC probably built as a Stablecoin. The Existing Intermediaries would still fulfill their existing roles while providing an option to use a CBDC network to transfer the money. The existing validation and verification for the number of transactions, the quantity of money transferred, and all of the checks for criminal activity and assurance for privacy would stay in place.



Figure 1: Theoretical Very Simplified Dual ACH-CBDC Network Concept.

Scenario	Step Number	Description
Current Process	1	The First End User (Person, Corporation, Institution, a Computer process, etc.) goes into an Existing Intermediary and wants to transfer money to a Second End User.
	2	The First Existing Intermediary uses the newly U.S. CBDC Application Programming Interface (API) to start the transaction. The First Existing Intermediary asks if the money is to be transferred immediately requiring U.S. CBDC or if it will just be done using U.S. Dollars.
	3	The First End User responds that they will be using U.S. Dollars.
	4	A transaction is created that meets the requirements of the ACH is formulated.
	5	The ACH Transaction is placed onto the existing ACH Network and routed to the appropriate Second Existing Intermediary.
	6	The Second Existing Intermediary receives the transaction and waits for the transaction to settle (usually within 24 hours).
	7	The Second Existing Intermediary places the money designated in the transfer transaction to the Second End User's bank account (i.e., debit, credit, checking, savings, Credit Card account, etc.)
	8	The Second End User possesses the money.
Scenario	Step Number	Description
U.S. CBDC Process	1	The First End User (Person, Corporation, Institution, a Computer process, etc.) goes into an Existing Intermediary and wants to transfer money to a Second End User.
	2	The First Existing Intermediary uses the newly U.S. CBDC Application Programming Interface (API) to start the transaction. The First Existing Intermediary asks if the money is to be transferred immediately requiring U.S. CBDC or if it will just be done using U.S. Dollars.
	3	The First End User responds that they will be using U.S. CBDC.
	4	The First Existing Intermediary verifies that the First End User has the correct amount of U.S. CBDC to complete the transaction. If Not, the First End User can convert some existing U.S. Dollars to U.S. CBDC to complete the transaction.
	5	A transaction is created that meets the requirements of the U.S. CBDC is formulated.
	6	The U.S. CBDC Transaction is placed onto the new U.S. CBDC Network and routed to the appropriate Second Existing Intermediary.

Scenario	Step Number	Description
	7	The Second Existing Intermediary receives the U.S. CBDC transaction after the transaction is been validated and verified by the U.S. CBDC Consensus Alorithm.
	8	The Second End User possesses the money.

Table 1: Various steps in using a simplistic theoretical dual ACH/CBDC network.

Examples

[Return to Top](#)

The “desirements” specified in [White Paper](#) and identified by the [OMG's White Paper Analysis](#) as **Privacy Issues** are listed in Table 2.

Table 2: Examples of **Privacy Desirements** identified during the White Paper Analysis conducted by the OMG

Category	Desirements
Benefits	B0004, B0022
Policies and Considerations	P0004
Risks	R0014
Design	D0012

Discussion of Examples

[Return to Top](#)

Table 3 provides discussion points for each of the “desirements” identified by the [OMG's White Paper Analysis](#).

Table 3: Privacy references of desirements in the **White Paper**

Desirement No.	Desirement Text	Comment
B0004	Protect consumer privacy	Consumer privacy is information privacy as it relates to the consumers of products and services. A variety of social, legal and political issues arise from the interaction of the public's potential expectation of privacy and the collection and dissemination of data by businesses or merchants

Desirement No.	Desirement Text	Comment
B0022	Provide a CBDC that is: 1. YES Privacy-Protected 2. NO Intermediated 3. NO Widely Transferable 4. NO Identity-Verified	Privacy-Protected means that the Central Bank Digital Currency (CBDC) protecting consumer privacy is critical. Any CBDC would need to strike an appropriate balance, however, between safeguarding the privacy rights of consumers and affording the transparency necessary to deter criminal activity.
P0004	Protect consumer privacy	See B0004 .
R0014	Risk of not achieving an appropriate balance between safeguarding the privacy rights of consumers and affording the transparency necessary to deter criminal activity	• See B0004 for Consumer privacy. • Transparency is the ability to easily access and work with data no matter where they are located or what application created them, or the assurance that data being reported are accurate and are coming from the official source.
D0012	Design should address privacy concerns by leveraging existing tools already in use by intermediaries	Intermediaries means commercial banks and regulated nonbank financial service providers, and would operate in an open market for CBDC services

From:
<https://www.omgwiki.org/CBDC/> - OMG Central Bank Digital Currency (OMG-CBDC) Working Group (WG) Wiki

Permanent link:
https://www.omgwiki.org/CBDC/doku.php?id=cbbc:public:cbbc_omg:04_doc:20_comments:brp:q12:start&rev=1650409337

Last update: 2022/04/19 19:02

