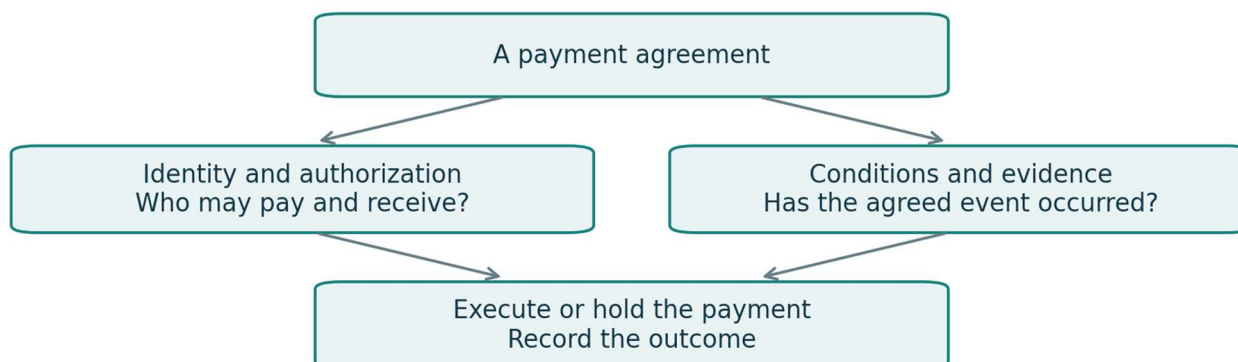


CBDC and programmable money

Understanding digital currency and conditional payments

Central Bank Digital Currency, or CBDC, is a digital form of central bank money. Programmability describes how software can govern payment instructions or, in some designs, the permitted use of digital value. The two concepts are related, but one does not automatically imply the other. [1–3]



What changes for a business

A payment can be linked to a verified event: goods arrive, a milestone is approved, or an asset becomes ready for transfer. The business opportunity is to coordinate these steps with fewer manual handoffs, consistent rules and a traceable record.

Four forms of value to distinguish

Form	What the holder generally holds
Cash	Physical central bank money, such as banknotes.
Bank deposit	A claim on a commercial bank, accessed through accounts and payment services.
CBDC	A digital central bank liability. Retail and wholesale designs serve different participant groups.
Tokenized asset or stablecoin	A distinct claim or instrument whose issuer, backing and rights must be examined; it is not automatically CBDC.

AI DIGIMARKET educational brochure | October 2026. Examples are illustrative designs, not claims about a particular country's deployed currency or available services.

Three meanings of programmability

Separate the payment instruction from the properties of money

Programmable payments

Software determines when or how a payment instruction is executed. Examples include scheduled transfers, payroll and release after delivery. The recipient can generally use the proceeds as ordinary money, subject to applicable account and payment rules. Existing bank systems already support many such workflows.

Programmable money

Rules are attached to the instrument itself, potentially restricting eligible recipients, purposes or periods of use. Such restrictions are design and policy choices. They are not inherent in CBDC, and should not be presented as a universal central bank plan.

Purpose bound arrangements

A separate wrapper or protocol can impose agreed conditions on underlying digital money. In June 2023, Singapore's MAS published a Purpose Bound Money protocol proposal and described trials for conditional commerce and rewards. This was a research and trial announcement, not proof of a nationwide retail CBDC launch. [3]

Current workflows and programmable alternatives

Example	Common current approach	Programmable approach
Supplier payment	Invoice, acceptance record and bank payment may be processed in separate systems.	Verified acceptance triggers an authorized payment; exceptions remain reviewable.
Project milestone	A manager approves work and finance releases a scheduled or manual payment.	An approved milestone event initiates the agreed payment automatically.
Asset purchase	Asset delivery and payment may require coordinated intermediaries and reconciliation.	Compatible settlement infrastructure links asset delivery and payment under defined conditions.
Restricted benefit	A voucher or specialized payment program limits eligible purchases.	A purpose-bound wrapper can encode eligibility and redemption conditions.
Usage billing	Meters feed an invoice and a later direct debit or bank transfer.	Validated usage can trigger capped, authorized payments at agreed intervals.

These outcomes are often possible today. Programmable infrastructure may improve coordination and integration; the benefit must be demonstrated against the existing system's cost, speed and reliability.

The ECB states that a digital euro would support conditional payments but would not be programmable money with predefined spending purposes. This illustrates why CBDC design must be assessed country by country. [2]

Practical examples

Illustrative amounts and rules for discussion

Example 1 Pay for cement after accepted delivery

A buyer orders cement for USD 20,000. Today, a delivery note, invoice approval and bank transfer may be handled separately. In a conditional workflow, the buyer reserves funds and authorizes release after a signed acceptance record. An authorized inspector confirms quantity and quality; the payment service then releases the amount.

If delivery is disputed or the acceptance deadline passes, funds remain subject to the agreed dispute or refund process. The payment system cannot independently know whether physical goods arrived: it relies on a trusted data source and accountable verification.

Example 2 Release project funding by milestone

A USD 100,000 project has three agreed releases: USD 20,000 after mobilization approval, USD 50,000 after inspection, and USD 30,000 after final acceptance. Software tracks approvals and initiates each release when the required evidence is recorded. A rejected inspection routes the case to review instead of triggering payment.

This programs payment timing. It need not restrict how the contractor spends the money after receiving it.

Example 3 A purpose bound training allowance

A program provides a USD 500 allowance redeemable with approved training providers before a specified date. A wrapper checks provider eligibility and validity. After a valid redemption, the provider receives ordinary spendable money under the program design. Unused entitlement follows the agreed return or expiry terms.

The restriction applies to this defined entitlement. It does not establish that everyone's cash, deposits or CBDC balances expire. The program needs clear terms, access alternatives and a correction or appeal process.

Example 4 Delivery versus payment for a tokenized asset

An eligible buyer agrees to acquire asset tokens for USD 10,000. On a compatible platform, both the asset and payment legs can be checked and executed together. If the required conditions fail, neither leg completes under that protocol. Separate ledgers require specifically engineered coordination; a payment API alone does not create atomic settlement. [1]

The same business scenarios may use conventional bank money, tokenized deposits, suitable stablecoins or CBDC where authorized. Currency conversion, transaction fees and applicable contractual terms are omitted from these simplified examples.

From concept to a useful pilot

Define the rules and the evidence before writing the code

A practical implementation model

- **Choose one workflow:** Start with a defined supplier payment, milestone release or other measurable business process.
- **Identify the money and operator:** Confirm the issuer, payment rail, access permissions, funding method and settlement responsibility.
- **Specify authority and evidence:** Define who approves a payment, which event proves fulfillment and how incorrect evidence is corrected.
- **Handle failure and disputes:** Design timeouts, refunds, duplicate prevention, exceptions and auditable human intervention.
- **Measure the benefit:** Compare processing time, reconciliation effort, error rates and total operating cost against the current workflow.

Potential benefits and practical limits

Well-designed workflows may reduce reconciliation work and shorten the time between verified fulfillment and payment. Outcomes depend on reliable data, participant adoption and integration quality. Privacy, access controls, resilience and user understanding are part of the design—not automatic properties of digital money.

AI DIGIMARKET engagement concept

AI DIGIMARKET can scope research, workflow design and a simulated prototype around a selected use case. The proposed SmartDefense Finance architecture contributes identity checks, authorization, integration and audit workflows. Any live CBDC connection depends on institutional approval and available interfaces; AI DIGIMARKET does not issue central bank currency.

Discuss a digital-money workflow: AI DIGIMARKET LLC, USA | aidigimarket.com

Sources and further reading

[1] BIS — Blueprint for the future monetary system, 2023

[2] European Central Bank — FAQs on the digital euro

[3] Monetary Authority of Singapore — Standards for digital money, 21 June 2023

Sources checked 5 October 2026. This brochure explains technology concepts and proposed service areas; it is not an announcement of a CBDC deployment or an investment offering.