The digital euro - a work in progress

ECB Civil Society Seminar Series

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Digital euro project
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Digital euro framework
What is the digital euro?

“The digital euro is a digital central bank liability for retail payments of citizens and businesses in the entire euro area”

Complementing, not substituting, cash and wholesale central bank deposits

Supervised intermediaries (e.g. banks and Payment service providers, PSPs) will facilitate the distribution of a digital euro

Digital euro as source of innovation and public good, shall not crowd out banks nor hinder innovation in payments
Where do we stand?
Tentative – timeline subject to change

**July 2021**
Governing Council decision to launch investigation phase

**Q4-2021**
- Project team onboarding
- Governance set-up

**Q1-2022**
- Prioritisation of use cases
- Publication of report on focus groups with citizens and merchants

**Q2-2022**
- Focus on: Design options to control take-up
- Distribution model

**Q3-2022**
- Online/offline availability
- Data privacy level
- Transfer mechanism

**Q4-2022**
- Focus on: Settlement model
- Amount in circulation
- Role of intermediaries
- Integration and form factor
- Prototype development

**Q1-2023**
- Finalisation of user requirements
- Preparations for project realisation phase

**Q2-2023**
- Selection of service provider(s) for project realisation phase
- Preparation of decision-making document with advice on potential digital euro issuance, design and implementation

**September 2023**
Governing Council decision to launch realisation phase

- Focus on: Compensation model
- Access to digital euro ecosystem
- Value added services
- Advanced functionalities
- Prototyping results
Digital Euro project governance & stakeholder management

Eurosysten governance structure & stakeholders

Political stakeholders
- European Parliament
- Eurogroup/EU Council
- European Commission

EC-ECB Contact Group

 Steering
- HLTFCBDC
- Project Steering Group (PSG)

Deciding
- Governing Council
- Executive Board

Eurosystem Committees

Project
- ECB project team and National Central Banks

Market stakeholders
- Market Advisory Group (MAG)
- Euro Retail Payments Board (ERPB)
- Special Interest Groups

In addition, the ECB consults the public/citizens via:
- Public consultation
- Focus groups
- Exchanges with CSOs
- Lectures and discussions with students
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Digital euro use cases
A digital euro use case describes a common payment scenario:

- **Person-to-person**: A payment between two people
- **Consumer-to-business**: A payment for goods or services purchased in a physical store (point-of-sale payment) or online via e-commerce
- **Business initiated payments**: A payment from a firm to another firm (B2B) or to an individual (B2P, e.g., wages)
- **X2G – G2X payments**: Payments to the government (X2G, e.g., taxes) and by the government (G2X, e.g., allowances and subsidies)
- **Machine initiated payments**: A fully automated payment initiated by a device and/or software based on predetermined conditions
Design choices
The use cases will rely on design features:

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See first progress report.
See second progress report.

* See progress report.
ECB Governing Council approved foundational design choices* (2/2)

Online / Offline

- Develop an offline peer-to-peer validated solution
- Develop an online solution validated by a third-party
- Exclude the development of an online peer-to-peer validated solution for the first releases (too experimental)

Privacy principles

- General
  - Respect personal data
  - Follow highest possible level of privacy
- Intermediaries
  - See transaction data needed for AML/CFT
  - Excl. lower value payments from AML/CFT checks (→ co-legislator)
- Eurosystem
  - Minimise dealing with personal data as much as possible
  - Use privacy-enhancing techniques

Tools to control amount in circulation

- Holding limit options
  - Digital euro holding limit with excess amount shifted to commercial bank account ("waterfall")
  - Different limits for online and offline use
  - Short deviations allowed

- Remunerations
  - Two-tiered remuneration
    - Step 1: 0% or positive
    - Step 2: possibly negative

* See progress report
Privacy options

• Digital euro will ensure privacy by default and by design, giving people control over their personal data and money.

• Central bank will not have access to personal data (can’t see people’s holdings, transaction histories or payment patterns) but intermediaries in order to comply with regulatory requirements will have access to personal and transaction data. There will be a trade-off between privacy and some important public policy objectives such as AML, CFT or even tax evasion.

• Offline digital euro could provide a degree of privacy close to cash. Offline will potentially cater for the highest level of privacy (this relies on political decision). A risk-based approach could also allow for more privacy in the case of less risky / low value transactions.

• Digital euro design will comply with the conditions ultimately set for privacy by legislators.

• It remains important to notice that digital euro won’t be programmable money (different from programable payments).
Role of intermediaries
Supervised intermediaries will play a key role in distributing the digital euro:

- Registering and managing digital euro end users, incl. opening digital euro account/wallets for end users.
- Funding and defunding of user’s digital euro holdings, for both natural persons using digital euro as means of payment and business users accepting digital euro payments.
- Initiating, processing and managing of digital euro transactions, taking control of the transaction life cycle including fraud prevention.
Ensuring usability of the digital euro – a scheme approach
The Eurosystem pursues a payment scheme approach to distribute digital euro.

- Scheme would define a set of common rules, standards and procedures which would ensure pan euro area reach.
- Promote a harmonised end-user payment experience.
- Provides the flexibility to respond to user preferences and habits.
- Allows for the most degrees of freedom for the market to distribute the digital euro and develop innovative front-end solutions.

Scheme rulebook manager appointed on 1st December

Set-up of a group of public- and private-sector participants to draft a scheme rulebook to commence soon.
Financial inclusion
Facilitating financial inclusion

A digital euro …

• can improve access to digital financial services (because of digitized value chains), …
• … ensuring that everyone in the euro area can pay and get paid with digital euro,
• can enhance the efficiency of digital payments and offer low transaction costs,
• can be used offline when there is no internet coverage,
• can facilitate the enrolment and education (via simplified due diligence and electronic know your customer), and
• foster interoperability (both domestically and cross-border) and facilitate a homogeneous end-user experience.
A digital euro for the future
The digital euro – a work in progress

- People’s payment behaviour is changing, and we continue to see a downwards trend in cash usage in the euro area. A digital euro would then enhance digital progress and integration in Europe.

- Since the introduction of the euro, the ECB has been responsible for preserving citizens’ trust in our currency.

- A digital euro would be accessible to all and offer people greater choice in how they pay.