



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Digital euro: the future of money

---

*Convegno Innovative Payments*

13 March 2024



**Piero Cipollone**  
Member of the Executive Board of the ECB

# 1

All-in-one:  
a European digital  
payment solution for  
all occasions

Rationale & key design choices

# Building the future of the euro, our money



## Responding to evolving payment trends

Reflecting people's increasing preference for digital payments while still offering the option to pay with cash



## Making people's lives easier

Providing a public digital means of payment that people could use free of charge for any digital payment in the euro area



## Strengthening Europe's resilience

Preserving Europe's strategic autonomy while reducing our dependence on non-European payment providers

# A digital form of cash

These payment options will continue to exist:



CASH



CARD



BANK  
ACCOUNT



OTHER DIGITAL  
PAYMENTS



A digital euro would bring **cash-like features** to the digital world



Pan-European  
reach



Free  
for basic use



Respectful of  
privacy



Also available  
offline



Issued by the  
central bank

# For everyone, on all occasions

Available for all people and businesses and all retail payment scenarios in the euro area, wherever digital payments are accepted

	Cash		National schemes (card or account based)		International schemes (card or account based)		Digital euro	
	Domestic	Euro area	Domestic	Euro area	Domestic	Euro area	Domestic	Euro area
Person-to-person payments	✓ *	✓ *	Some	✗	✗	✗	✓	✓
Point-of-Sale payments	✓	✓	✓ **	✗ ***	✓ **	✓ **	✓	✓
E-commerce payments	✗	✗	Some	✗ ***	✓ **	✓ **	✓	✓

\* Only proximity transactions, unless mailing cash

\*\* Where accepted

\*\*\* Only through co-branding with international schemes

# Available online and offline

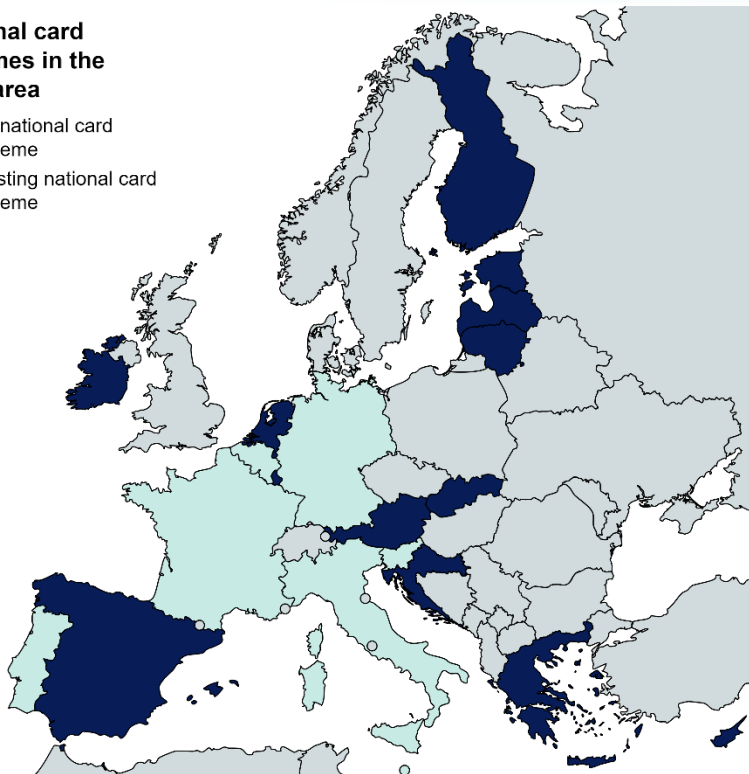
An **offline functionality** would enable transactions to be made in locations with limited network coverage

	Cash	Cards	E-payment solutions	Digital euro
Online	✗	✓	✓	✓
Offline	✓	✗	✗	✓

# European by design

## National card schemes in the euro area

- No national card scheme
- Existing national card scheme



**There is currently no European digital means of payment covering all euro area countries:** 13 out of 20 euro area countries don't have a national card scheme and instead rely on international schemes for digital payments, which settle 69% of all digital transactions in the EU



**A digital euro would fill this gap,** providing a European digital means of payment accessible and accepted in all euro area countries



**A digital euro would provide a pan-European platform** that would standardise digital payments in the entire euro area

# Accessible and inclusive: no one left behind



Digital euro payments could also be made using a **physical card**; cash can be used for digital euro funding/defunding



Users would always have access to **face-to-face technical support** and the option to easily **switch intermediaries**



In addition to payment service providers, selected **public entities** would also operate as intermediaries for users that do not have a bank account



# Protecting your data and privacy



## State-of-the-art technological solution



The Eurosystem would not be able to identify people based on the payments they make – it would only see a minimal set of pseudonymised data

## Strong data safeguards



The Eurosystem would implement **safeguards**, including internal data segregation and auditing, to ensure high data protection standards

## Flexibility to ensure we are ready for the future



The Eurosystem would adopt additional, innovative **privacy-enhancing techniques** when ready and tested for large payments systems, fostering higher privacy standards for digital euro users



# 2

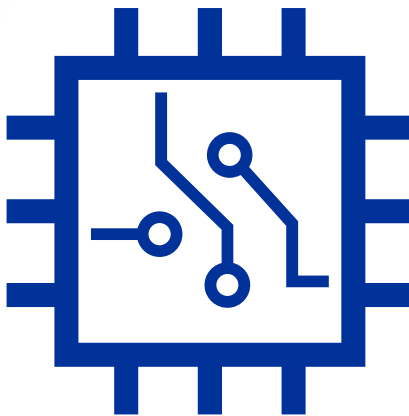
## Payment service providers on the distribution frontline

A public-private cooperation




# Intermediaries play a key role as digital euro distributors

## Distribution via supervised payment service providers (PSPs)

-  PSPs would **exclusively distribute** a digital euro
-  PSPs would exclusively maintain **customer relations**
-  PSPs would benefit from **digital euro open standards**



## Healthy balance between central bank and commercial money

-  (Reverse) **waterfall functionality** through link to bank account
-  **No remuneration**
-  **Holding limits** for end users (none for corporates)

# A digital euro: pan-European rail tracks for private solutions...



... Offering **a platform for innovation** for private providers to build value-added services, such as conditional payments or the possibility to split a bill between people



... Enabling private retail payment solutions to **leverage the digital euro infrastructure** to provide new products in all euro area countries. This would also give users access to services that may not yet be available in their domestic market



... Reducing our **dependence on other non-European players**




# A rulebook to ensure banknote-like usability in the euro area






## Rulebook Development Group (RDG)



A **digital euro rulebook** would establish **common standards** to:

-  Ensure **pan-European reach** and a **harmonised payment** experience
-  Give **the market freedom** to develop innovative solutions
-  Expand domestic instant payment solutions to the entire **euro area**

The rulebook is being drafted with the **broad involvement of market participants** representing society at large:

-  **Intermediaries**
-  **Retailers**
-  **Consumers**

# 3

## Project timeline

The way forward

# Staying ahead of the curve: preparing our currency for the future

## Investigation phase

October 2021 – October 2023

Concept definition, technical exploration and design proposal

## Preparation phase

November 2023 – October 2025

Main expected next steps:

- Finalise the **scheme rulebook**
- Select **service providers**
- Learn through **experimenting**
- **Dive deeper**, including conducting further research on offline functions and drafting a test and roll-out plan for the future

## Next phase

From November 2025

Potential development and roll-out

A decision to issue will only be considered by the ECB once the European Union's legislative process has been completed

## Additional supporting materials:

- Updated digital euro [FAQ](#)
- [Report](#): A stocktake on the digital euro
- [ECB Opinion](#) on the European Commission's legislative proposal on digital euro
- Digital euro [two-pager](#)
- Digital euro [booklet](#)
- Digital euro [LinkedIn page](#)

---

# Thank you



# Annex

# At the project's core: constant collaboration with all stakeholders

## European policymakers: a joint European effort

- + European Parliament
- + Council of the EU & Eurogroup
- + European Commission
- + Other EU bodies

## Market participants: broad support from consumers and merchants

- + Financial institutions
- + Consumers, merchants and acquirers
- + Infrastructure and technology providers



## General public: engaging with end users

- + Civil society organisations
- + EU citizens

## Central banks: setting global standards

- + Non-euro area European System of Central Banks (ESCB) members
- + Bank for International Settlements
- + Central banks with central bank digital currency (CBDC) projects