



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Update on digital euro

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02/12/2024

**Evelien Witlox** Programme Manager of the digital euro project

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# 1

**Project update:  
Focusing on digital  
euro fundamentals**

# Preparing our currency for the future

## Investigation phase

Oct. 2021 – Oct. 2023

Concept definition,  
technical exploration and  
design proposal

## Preparation phase

Nov. 2023 – Oct. 2025

Main expected next steps:

- Finalise the **scheme rulebook**
- Select **service providers**
- Learn through **experimentation**
- **Deeper dive** into technical aspects, including further research into offline functions and developing a testing and rollout plan for the future

## Next phase

From Nov. 2025

Potentially developing and  
rolling out digital euro use  
cases

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

# Key achievements in relation to the phase milestones



## Sourcing of providers

- Publication of **procurement documentation** on 31 July
- **Offers received** and preparing **evaluations**

## Experimentation and user research



- Initiation of fieldwork on **User Research**
- Workshop on business-to-business payments
- Preparing for **technical exploration** of use of Conditional Payments



## Preparation of the rulebook

- Launch of **additional rulebook workstreams**
- **Assessment of feedback** from consultation
- **Publication of report** on work of rulebook

## Conducting further analysis



- Further **analysis** and **refinement** of documentation
- Methodology for **calibration of holding limits**
- Work on **fit of the digital euro in the ecosystem**



## Supported by:

- Extensive **engagement** with **co-legislators** and with **market stakeholders**
- **Public communication efforts** aimed at raising awareness



# Preparation of the rulebook



Essential for harmonisation of digital euro payments

➔ sufficiently flexible to accommodate any future adjustments deriving from **digital euro legislative process**

## Market stakeholders

Consumers, retailers, intermediaries

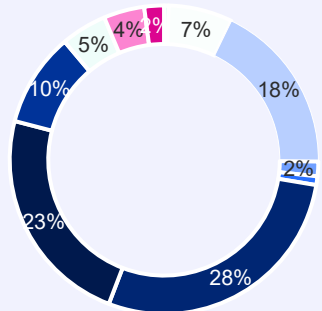


## Institutional stakeholders



In Q1 2024 the Rulebook Development Group (RDG) reviewed intermediate draft of rulebook in its entirety; all comments were assessed and will be addressed

% of comments received on the relevant materials



Rulebook section	# of comments
1. Document information	10
2. Scope and interplay	140
3. Functional and operational model	
Business rules	375
Identification and authentication	32
Dispute management	19
Annex A1 user journeys	588
Annex A2 E2E flows	484
Business rules x flows mapping	205
4. Adherence model	100
5. Technical scheme requirements	89
8. Defined terms and abbreviations	43
<b>Total</b>	<b>2295</b>

# The rulebook's envisaged list of content to provide requirements and specifications

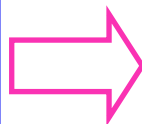
## Envisaged table of content of draft rulebook



### Draft digital euro rulebook

[1st intermediate draft]

- **Document information**
- **Digital euro scheme scope and interplay**
- **Functional and operational model**
  - High-level E2E flows
  - Identification and authentication
  - Dispute management principles
- **Adherence model**
- **Technical scheme requirements**
- **Defined terms and conditions**
- **Annexes**
  - User journeys
  - Detailed end-to-end flows
  - FAQ



### Draft digital euro rulebook

[2nd draft]

- **Document information**
- **Digital euro scheme scope and interplay**
- **Functional and operational model**
  - High-level E2E flows
  - Identification and authentication
  - Dispute management principles
  - Minimum UX standards
- **Adherence model**
- **Technical scheme requirements**
  - Interface standards and specifications
- **Risk management**
- **Scheme management**
- **Defined terms and conditions**
- **Annexes**
  - Illustrative User journeys, detailed E2E flows, Branding standards, scheme compatibility and interoperability
  - Detailed technical specifications, implementation guidelines, certification-related documentation
  - FAQ

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2

**Fit in the  
Ecosystem  
workstream**

# Engagement with all stakeholders ensures diverse needs are catered for

Extensive engagement on design decisions in the ERPB over the past years paves the way for further deep-dives:



## Payment Service Providers

*Deep-dive already started*

- + Enhance competitiveness vis-à-vis global competitors
- + Pan-European merchant reach across use cases through open digital euro standards



## Merchants

*Deep-dive targeted for H1 2025*

- + Increased access to European consumers base
- + Efficient, instant-settlement alternative to dominant solutions
- + Safeguards for setting of merchant fees



## Consumers

*Deep-dive targeted for H1 2025*



- + Ultimate beneficiary of increased competition in payments
- + Access to public money in digital age
- + High privacy option for everyday payments

## European policymakers



- + Monetary sovereignty
- + Strategic autonomy
- + Enhanced resilience



# Balancing the digital euro value proposition and the enabling of private payment solutions



## Digital euro project made conscious choices to support European payment service providers:

- Distribution through EU licensed PSPs, with only settlement done by central bank
- Compensation model that allows for both merchant- and interchange fees (up to EU legislator)
- Safeguards to limit attractiveness as means of investment
- Pan-European payment rails for private solutions via open digital euro standards
- Platform for innovation and value-added services based on Eurosystem-supported auxiliary services

# A deep-dive into payment service providers' concerns can help unlock the full benefits of a digital euro

Engagement with a focus on two main **concerns of payment service providers**

1

Impact on bank  
intermediation\*

2

**Revenues and costs  
of implementation**

3

**Interaction with other  
market players**

\* Dedicated workstream and corresponding stakeholder engagement, as known to the ERPB

# The engagement has kicked off with the competition theme

Competition

First discussion:  
Q4 2024 - Q1 2025

Impacting PSPs'  
bargaining power

Impacting PSPs'  
competitiveness

Co-existence

Synergies

Second discussion:  
Q4 2024 - Q1 2025

Synergies in the  
front-end

Synergies in the  
back-end

Business model

Third discussion:  
Q1 2025 - Q2 2025

Compensation\*

Implementation  
cost

Operating cost

\* Subject to legislation

# 3

**Update on work on  
methodology for  
holding limit  
calibration**

# The Eurosystem workstream on the methodology for the calibration of the holding limit

The individual holding limit is a **key - though not the only - design feature** to mitigate the digital euro's impact on bank intermediation.



Workstream's objective for this phase: developing a **methodology which would be necessary for calibrating the individual holding limit.**

It also aims to



➤ Build the **necessary expertise** to for a complex technical exercise.



➤ facilitate open and factual discussion on **all relevant factors** based on **methodological considerations** and **granular data**;



➤ increase **predictability** regarding potential individual holding limits ahead of the potential launch.

# Our framework of analysis

Framework based on the **objectives set out in Article 15.1 of the draft digital euro regulation**

**2. Ensure effectiveness of monetary policy**

**1. Ensure usability as a means of payment**

**3. Ensure financial stability**



**Holding limit**

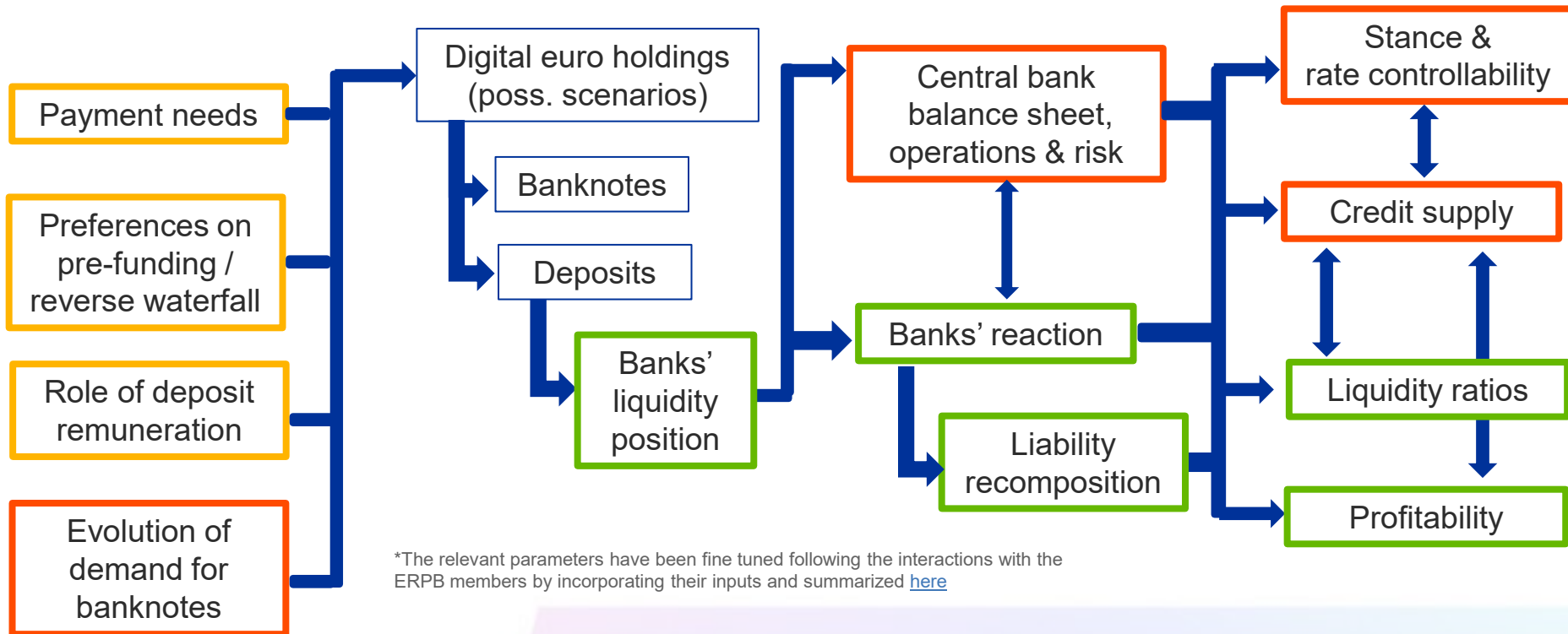
**Individual holding limits** should be established taking into account the **public good nature** of the digital euro and **proportionality principle**: restrictions should be necessary, appropriate and the least intrusive to maintain financial stability and support the effectiveness of monetary policy

# Relevant parameters for the calibration of the holding limit\*

Block 1: Usability

Block 2: Monetary policy

Block 3: Fin. stability & banking supervision



\*The relevant parameters have been fine tuned following the interactions with the ERPB members by incorporating their inputs and summarized [here](#)

# Methodology for the calibration of the holding limit - Interaction with market stakeholders in 2024



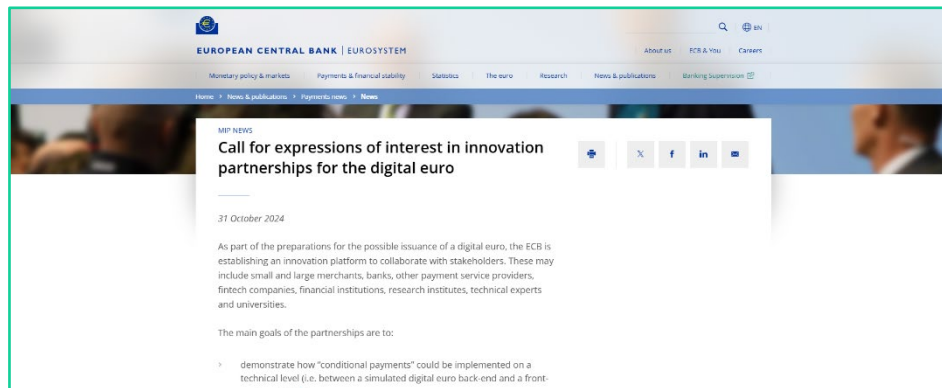


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4

**Experimentation -  
Innovation  
partnerships**

# We continue to engage with market participants on a technical level



On 31 October, we published a *Call for expression of interest* to attract market participants to join an open and transparent experimentation exercise. Interested parties can apply until the 29<sup>th</sup> November.

# One engagement serving three goals



## First, enable:

- an engagement without entry-barriers by providing technical infrastructure for participants to innovate on. Anybody who wants to work with us, will be able to do so.



## Second, explore:

- Better understand what's required for the use case *Conditional Payments*



## Third, listen:

- Tap specialised and interdisciplinary knowledge (i.e. also involving academia and diverse market participants) and receive independent feedback on the digital euro's potential

## One engagement split in two workstreams



### Main scope: Pioneers

- Facilitate **technical testing** against digital euro infrastructure and **prove implementation of conditional payments**
- **Open participation** (minimum selection against potentially harmful applications)
- **Open collaboration** (onboarding package, technical support, no direct/weekly interactions, participants remain owners of created IP and may be allowed to communicate on their contribution)
- **On-site event at the ECB**
- To be **summarised in a report** to be published by the ECB



### Secondary scope: Visionaries

- **Conceptual work** to explore e.g. innovative use cases (e.g. also covering B2B payments), community impact and societal considerations involving multiple stakeholders with different backgrounds
- **All entries will be assessed** whereas the most interesting, innovative and coherent visions will be invited
- **One-off half day workshops** to promote the most original ideas
- **On-site event at the ECB**
- To be **summarised in a report** to be published by the ECB

**Thank you!**