



EUROPEAN CENTRAL BANK

EUROSYSTEM

The digital euro - a work in progress

ECB Civil Society

Seminar Series

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Agenda

- 1 Digital euro framework – Purpose and timeline
- 2 Digital euro use cases
- 3 Design choices
- 4 Privacy options
- 5 Role of intermediaries
- 6 Ensuring usability of the digital euro – a scheme approach
- 7 Financial inclusion
- 8 A digital euro for the future

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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

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

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

- Focus on:
- **Compensation model**
 - **Access** to digital euro ecosystem
 - **Value added** services
 - **Advanced functionalities**
 - **Prototyping** results

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

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



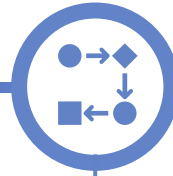
- Focus on:
- **Online/offline** availability
 - **Data privacy** level
 - **Transfer mechanism**

Q3-2022



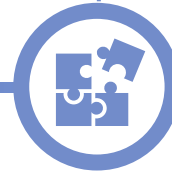
- Focus on:
- **Design options** to control take-up
 - **Distribution** model

Q4-2022



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

Q1-2023



- Focus on:
- **Compensation model**
 - **Access** to digital euro ecosystem
 - **Value added** services
 - **Advanced functionalities**
 - **Prototyping** results

Q2-2023



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

Q3-2023



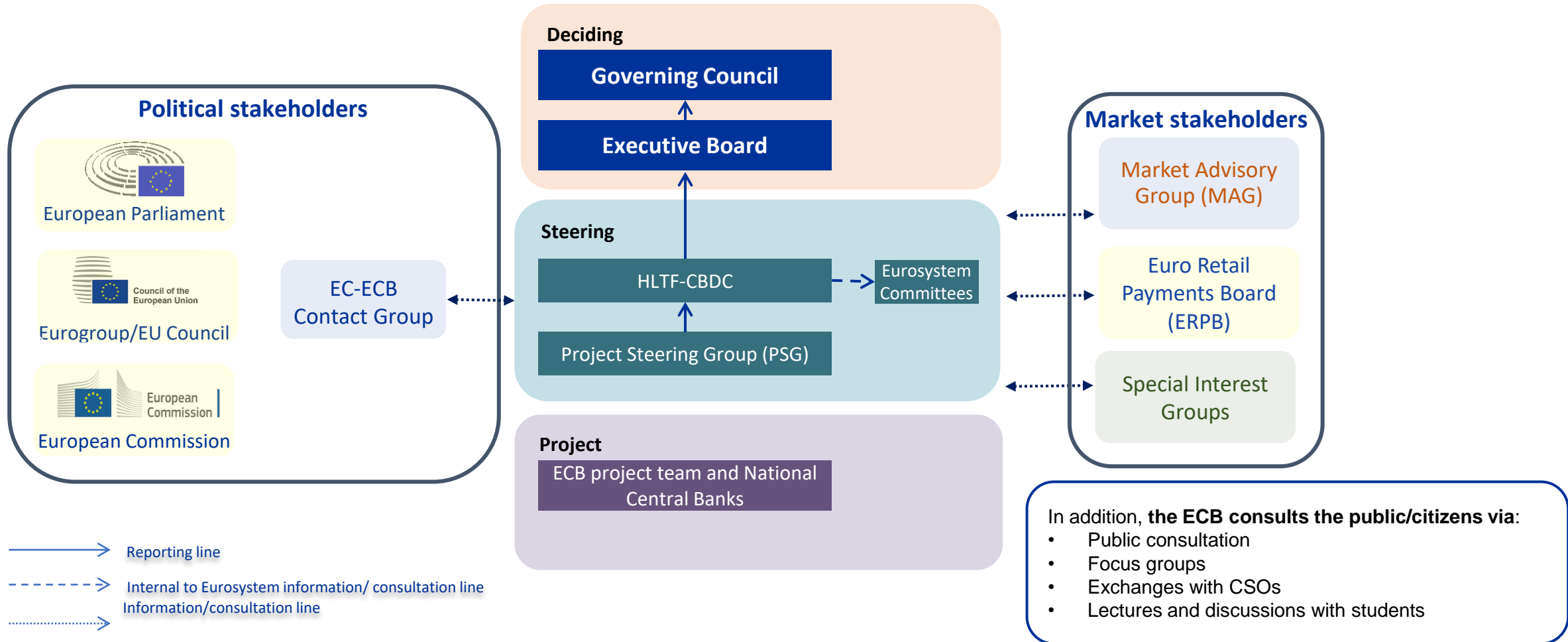
- Selection of **service provider(s)** for project realisation phase
- Preparation of **decision-making document** with advice on potential digital euro issuance, design and implementation

September 2023

Governing Council
decision to launch
realisation phase

Digital Euro project governance & stakeholder management

Eurosystem governance structure & stakeholders

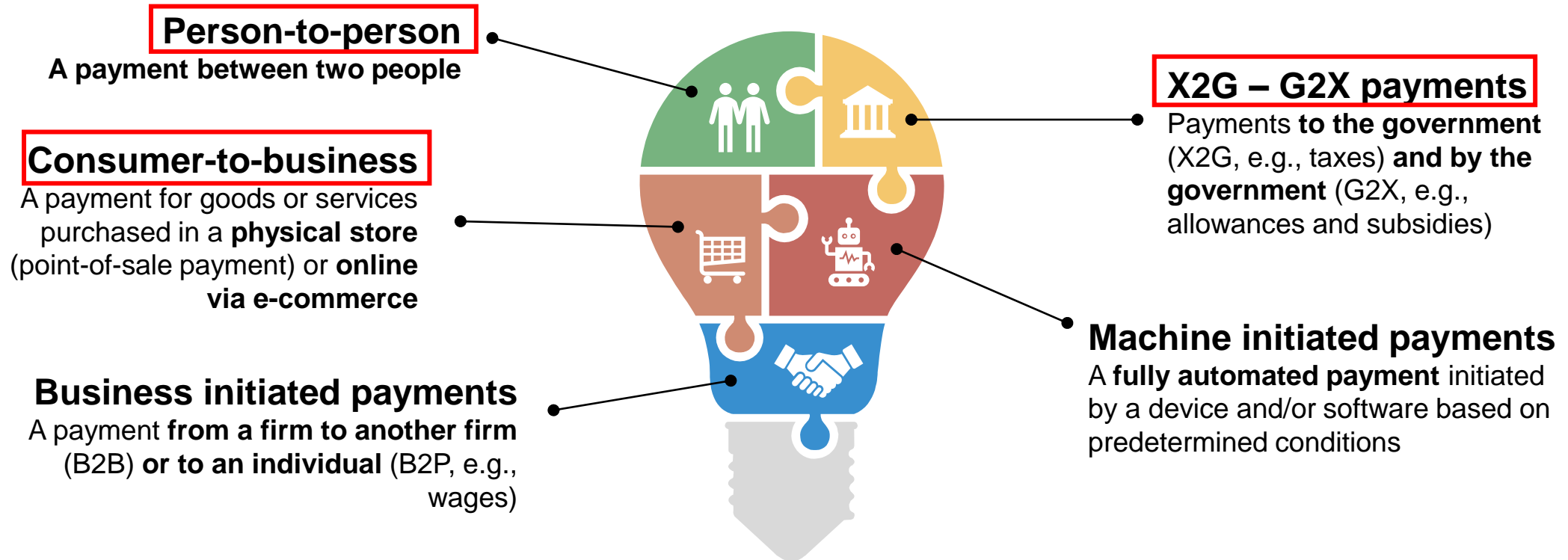


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Digital euro use cases

Digital euro use cases

A digital euro use case describes a common payment scenario:

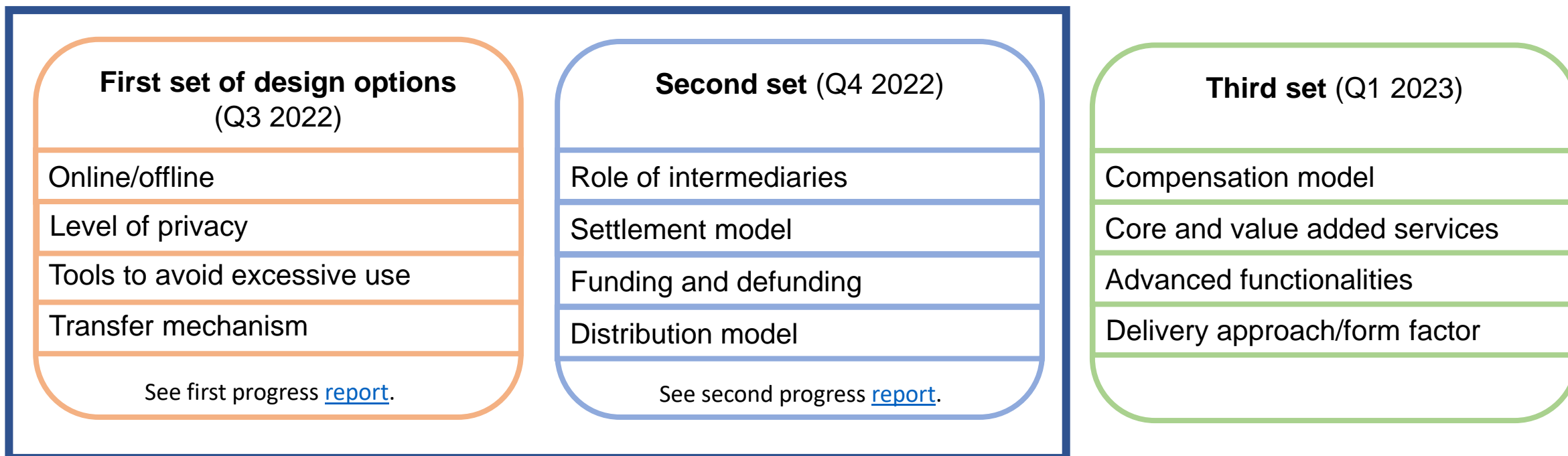


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Design choices

ECB Governing Council approved foundational design choices* (1/2)

The use cases will rely on design features:



* 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

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Privacy

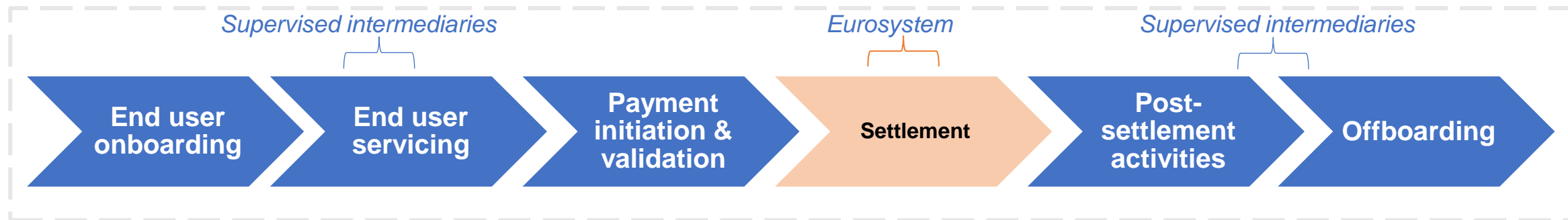
Privacy options

- 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).

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Role of intermediaries

Role of intermediaries in the digital euro ecosystem



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.

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Ensuring usability of the
digital euro – a scheme
approach

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

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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.



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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.