



EUROPEAN CENTRAL BANK

EUROSYSTEM

Advanced functionalities: Cross-currency

Euro Retail Payments Board



10 November 2022

Digital euro project team

Where do we stand?

Tentative - timing subject to change

July 2021
Governing Council
decision to launch
investigation phase

Use case prioritisation
Report on focus groups with
citizens and merchants



Design options to moderate take-up
Distribution model



Compensation model
Access to ecosystem
Value added services
Advanced functionalities

Prototyping results



Selection of service provider(s)
for possible project realisation
phase

Decision making document
including advice on potential
issuance digital euro, its design
and implementation plan



Q4-2021

Q1-2022

Q2-2022

Q3-2022

Q4-2022

Q1-2023

Q2-2023

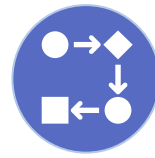
Q3-2023



Project team on-boarding
Governance set-up



On-line/off-line availability
Data privacy level
Transfer mechanism



Settlement model
Distribution of amount in circulation
Role of intermediaries
Integration and form factor
Funding and defunding
Prototype development



User requirements

Preparation for possible
project realisation phase
decision making

autumn 2023
Governing Council
decision to possibly launch
realisation phase

Objective of today's exchange



Present the investigation of **cross-currency payment functionalities** for the digital euro.



Invite your feedback on the analysis of **cross-currency digital euro payments functionalities** identified by Eurosystem (followed by written procedure until 5 December) as input for Eurosystem preparations of final decisions on these functionalities by Governing Council in Q1 2023

What this dossier is about



Analysis of **design choices for cross-currency payments**, which are payments where the money sent by a payer and that received by a payee are denominated in two different currencies

→ debiting and crediting in **different currencies and FX conversion**

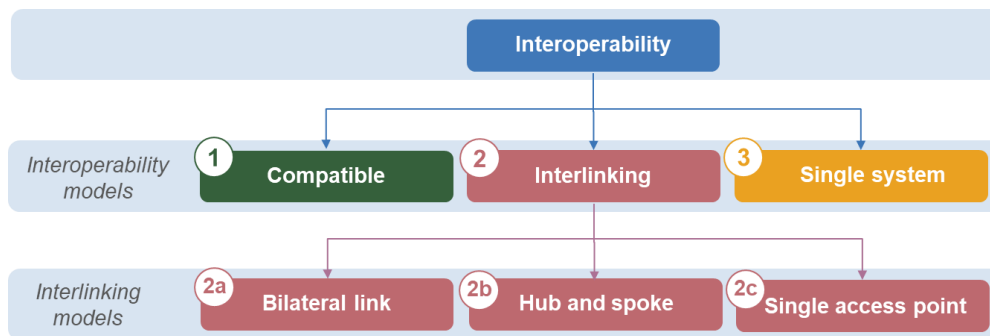
Context:

- work conducted under the auspices of the G20, in which three possible **interoperability models** are considered
- discussion on **use cases** that CBDC cross-currency payments could serve



G20/BIS models for interoperability applied to the context of retail CBDC

G20/BIS interoperability models applied to retail CBDC context



- ① **Individual CBDC systems using common standards**, such as message formats, cryptographic techniques, and data requirements
- ② **Different CBDC systems are linked** (e.g., set of contractual agreements, technical links, operational components), allowing participants to **transact with one another without participating in each system**
 - **Most realistic; Advanced economies**
- ③ **Shared single system among the multiple currencies** involved in the cross-currency CBDC transaction
 - **Most ambitious; Regional (EEA) CBDCs; Impact on design of D€ back-end**

Use cases and front-end considerations

Possible use cases to explore with other jurisdictions

A digital euro shall be developed with a view to **domestic payments first**
Cross-currency use can only be considered **for future releases** and **depending**
on the possible **development of CBDCs by other central banks**

Start
exploration
here?

Digital euro transactions



Person-to-person (P2P): a payment between two **people**



Consumer-to-business (C2B): a payment for goods or services purchased in a **physical store**



(point-of-sale payment) or online via **e-commerce**

Payments to the government (X2G, e.g., taxes) and **by the government** (G2X, e.g., allowances and subsidies)

Cross-currency transactions

1st cross-currency **person to person payments in CBDC with FX conversion** (incl. remittances)

2nd digital euro users purchasing goods and services from an **online merchant outside of the EA** with currency conversion

digital euro users purchasing goods and services from a **merchant outside of the EA at a physical point of sale** with currency conversion

Not in scope for cross-currency

Way forward and discussion

Conclusions

- Prioritise the timely delivery of a digital euro that meets the **needs of the domestic market**
- Explore the **interest of other jurisdictions** towards establishing cross-currency interoperability once both CBDC will possibly be in place
- Contribute actively to the discussion in the international fora, also working on **standardization and harmonization** as much as possible up front

Way forward



Further investigation on cross currency functionalities



Consultation of Eurosystem committees



**Outreach to other Central Banks and international fora,
as well as external stakeholders**



Eurosystem views to be **updated in Q1 2023** based on the outcome of Eurosystem committees' consultation, preliminary external discussions and further internal analysis, and to be **finalized towards the end of the investigation phase**



Review of combined design decisions (“Bringing it all together”) in Q2 2023 and feedback by stakeholders on overall design prior to Governing Council decision making thereafter

For feedback

We invite **reflections on all aspects of the analysis**, including the following questions:

- Do you agree that the digital euro should prioritise first the **needs of the domestic market**?
- What is your view on the **feasibility** of facilitating remittances & e-commerce payments for cross-currency transactions?
- What **challenges** do you see in achieving cross-currency interoperability under the various use cases?
- What **obstacles** do you see to the provision of cross-currency payments in digital euro? Which ones would the Eurosystem need to address concerning the provision of cross-currency payments in digital euro?

Thank you
