

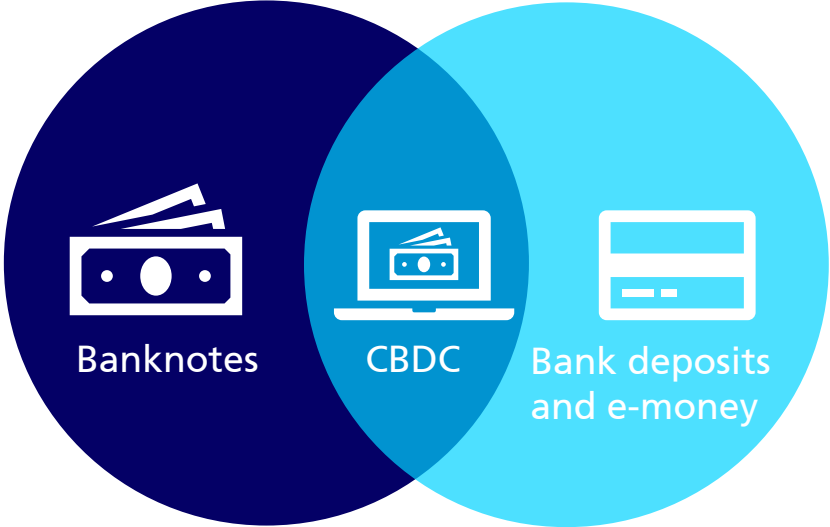
Digital Euro Update

Current progress & future work

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TUM Blockchain Salon
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Central Bank Digital Currency

Issued by the central bank



Banknotes

CBDC

Bank deposits
and e-money

Digital money

The move towards CBDC is gaining momentum

90%

of central banks
worldwide are actively
engaged in CBDC work

62%

are experimenting with
design and technology

26%

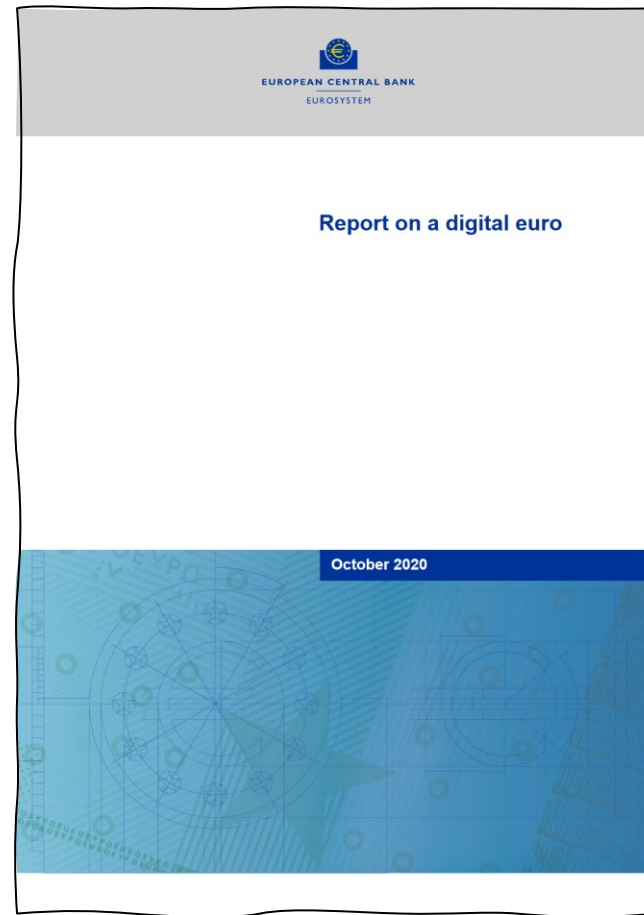
are deploying pilot
projects

Around 70% of Central Banks worldwide say
that they are likely to introduce a CBDC



Digital Euro overview

- 1 Central bank liability in digital form
- 2 Use by citizens and businesses
- 3 Focused on retail payment needs
- 4 Complements cash & deposit money

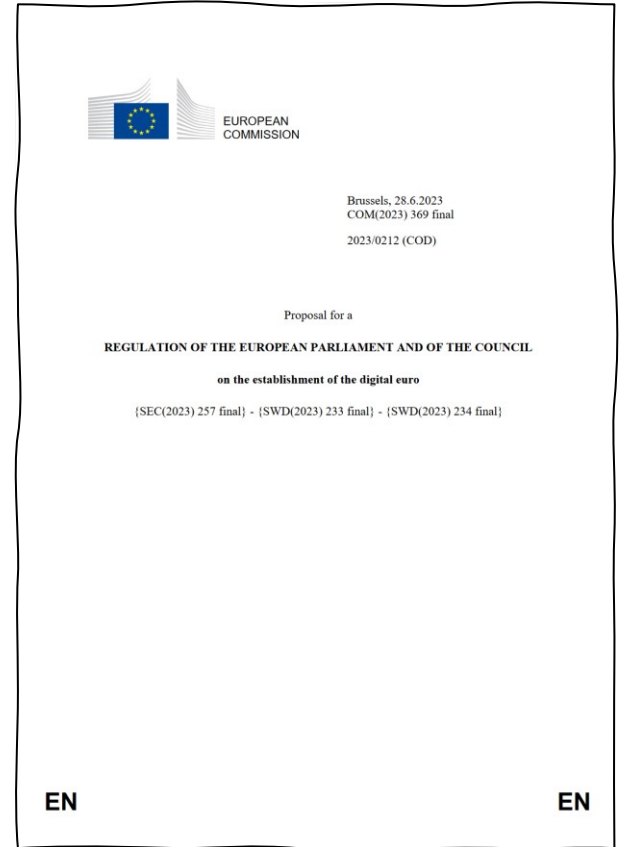


Timeline



Legal framework

- currently under consideration by the European Parliament
- required to establish and fully implement a Digital Euro
- essential elements of the regulation:
 - privacy
 - holding limit
 - compensation model
 - legal tender
 - multiple accounts per person
 - ...



<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0369>



Wallets & Ecosystem

“Currency cannot be private, money is a public good of sovereignty”

François Villeroy de Galhau



Creation



Distribution



Usage





1

ECB will not deal with users directly

2

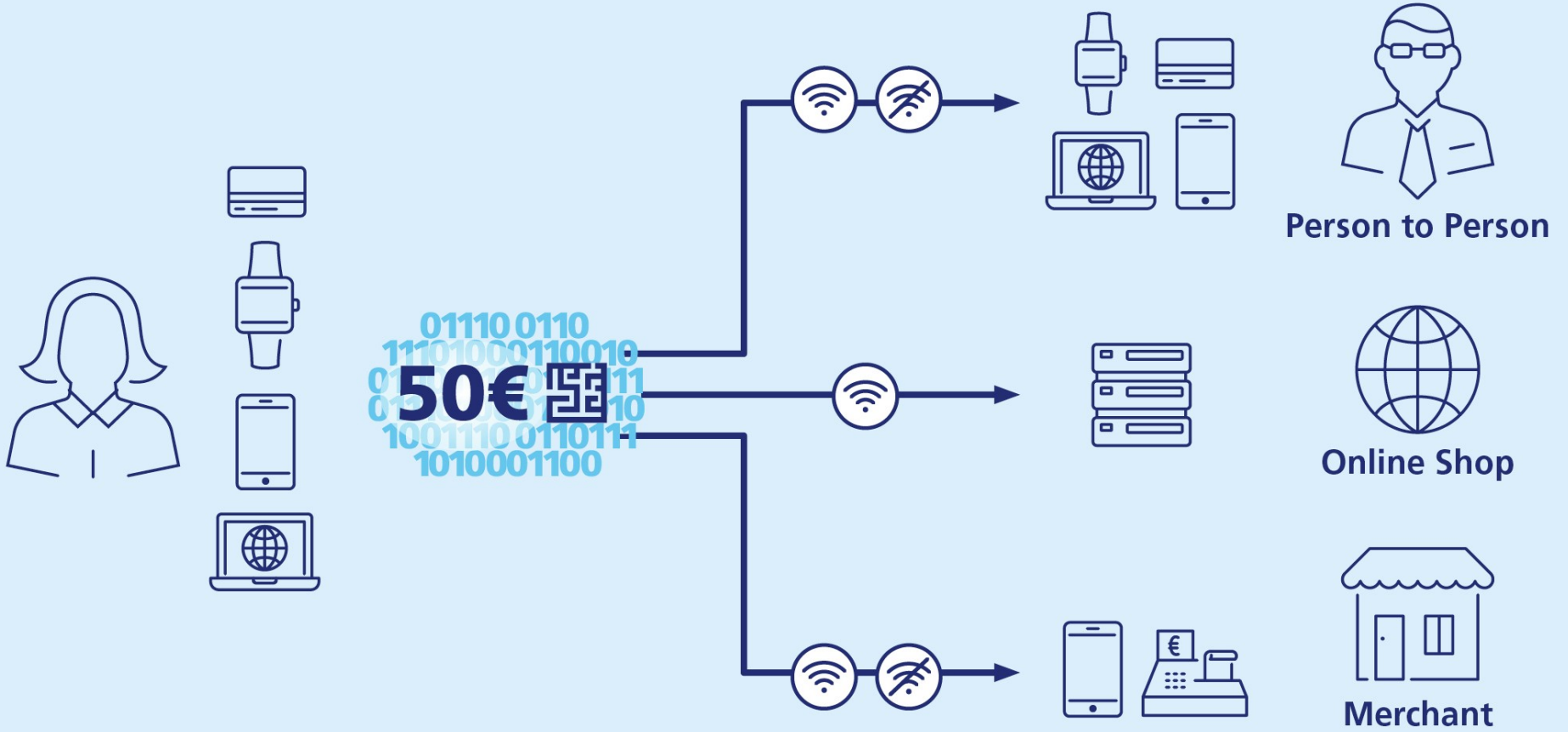
Digital Euro will not be programmable

3

Legal tender without interest

4

Payments can be conducted offline



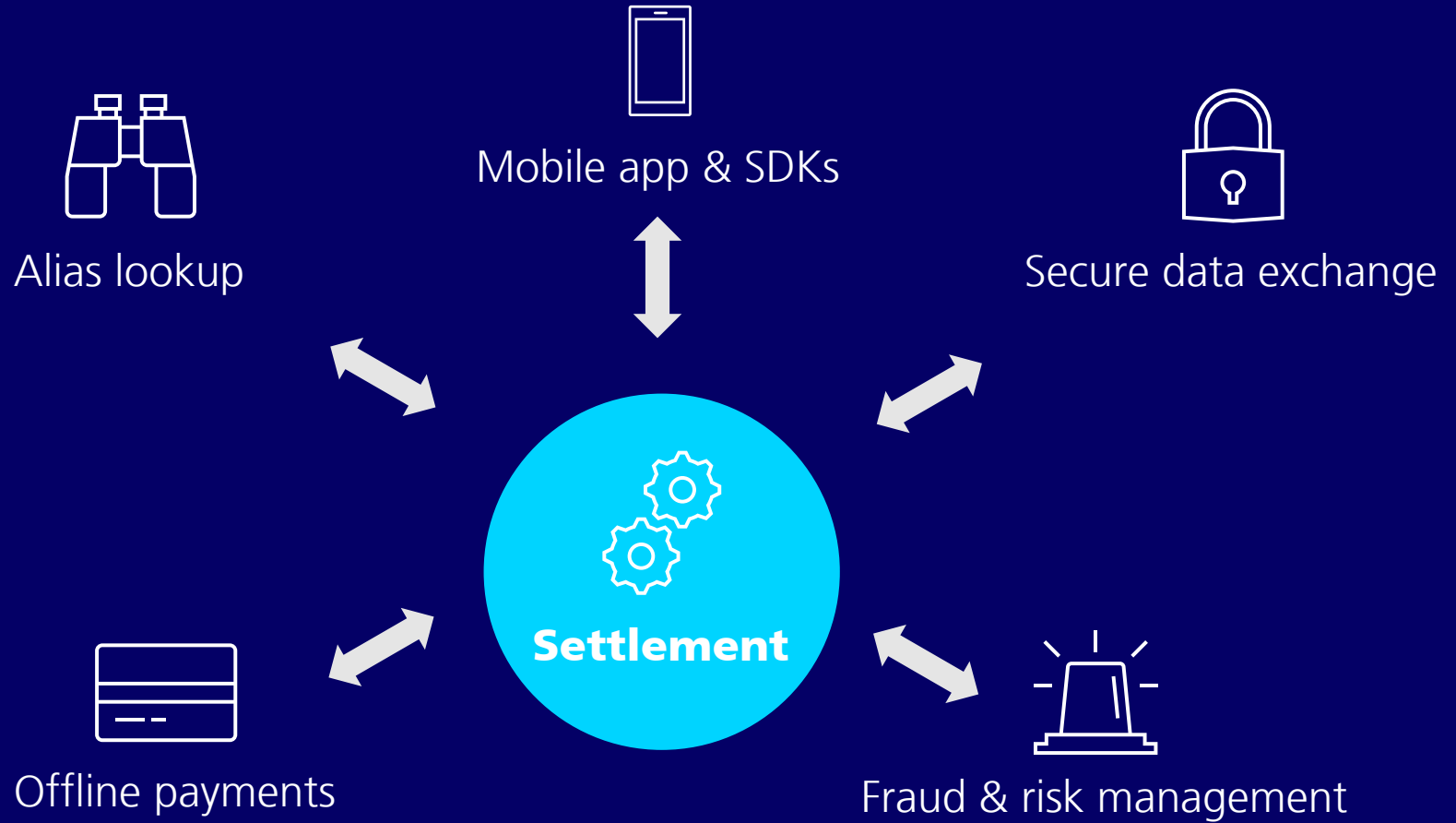
Where is the money?

Custodial wallet



Bearer wallet



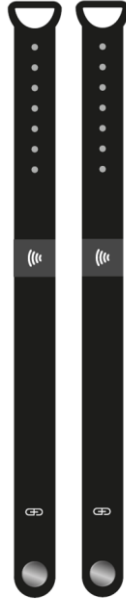
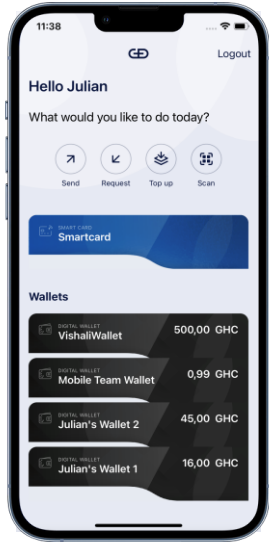




Offline capabilities

NETFLIX

Wallet form factors



Current payment solutions

Digital Euro capability

No Internet



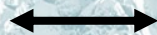
Neither Internet nor mobile connectivity

Only one party (payer or payee) is offline



Both parties are offline

One-time offline transaction



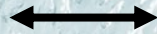
Consecutive offline transactions

Offline payments at POS of merchants



Both POS and person-to-person payments

Payments is settled online



Instant settlement (re-spendable)

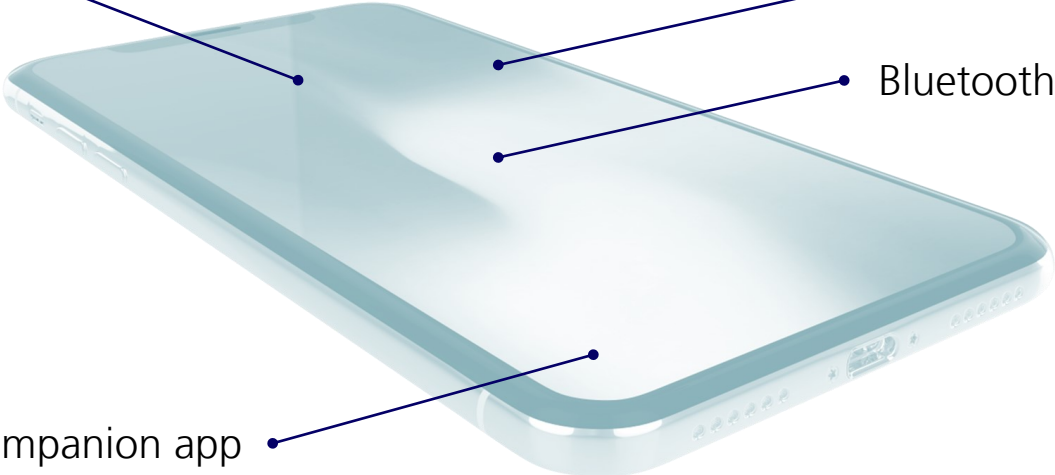
Hardware wallet requirements

Secure Element
(eSE/eSIM/SIM/
external)

NFC

Bluetooth (LE)

Companion app



Questions? Answers!

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Sources

- François Villeroy de Galhau: Denis Morin, CC-BY-SA 4.0