
Your views on a digital euro

About the respondent (15781)

I give explicit consent for my personal data to be disclosed together with my reply. (213434)

Type: (M/multiple-opt)

[X]

Yes **(213435)**

I am responding as: (213418)

Type: (!/list-dropdown)

A1 - Academic/research institution

Type of business association: (213419)

Type: (!/list-dropdown)

-oth- -

Type of company/business organisation: (213420)

Type: (!/list-dropdown)

-oth- -

Organisation size: (213422)

Type: (!/list-dropdown)

A4 - Large (250 or more employees)

Please specify your activity field(s) or sector(s): (213427)

Type: (!/list-dropdown)

A11 - Other

Age group (213430)

Type: (!/list-dropdown)

A5 - 45-54

Gender (213431)

Type: (!/list-dropdown)

A2 - Male

Country of residence (213432)

Type: (!/list-dropdown)

A28 - Other

User perspective (15779)

How would you rank, in order of importance, the features that a digital euro should offer?

(213414)

Type: (R/ranking)

Rank #1:

-

Rank #2:

-

Rank #3:

-

Rank #4:

-

Rank #5:

-

Rank #6:

-

Rank #7:

-

Rank #8:

-

Rank #9:

-

Do you have any further comments about the ranking that you have indicated above? (213508)

Type: (T/text-long)

Do you envisage any challenges associated with a digital euro that would prevent you or others from using it? If so, what are they? (213415)

Type: (T/text-long)

What user features should be considered to ensure a digital euro is accessible for people of all ages, including those who do not have a bank account or have disabilities? (213416)

Type: (T/text-long)

There are two approaches we can take to make a digital euro work, one that requires intermediaries to process the payment and one that doesn't. If we design a digital euro that has no need for the central bank or an intermediary to be involved in the processing of every single payment, this means that using a digital euro would feel closer to cash payments, but in digital form – you would be able to use the digital euro even when not connected to the internet, and your privacy and personal data would be better protected. The other approach is to design a digital euro with intermediaries recording the transaction. This would work online and allow broader potential for additional services to be provided to citizens and businesses, creating innovation opportunities and possible synergies with existing services. For example, it could make it easier to integrate a digital euro into currently available electronic banking services and applications. From your perspective, which of the following do you find most appealing? (select one): (213417)

Type: (!/list-dropdown)

-

Do you have any further comments regarding your answer to the question above? (213509)

Type: (T/text-long)

Financial, payment and technology professionals' perspective (15776)

What role do you see for banks, payment institutions and other commercial entities in providing a digital euro to end users? (213354)

Type: (T/text-long)

The role of banks as supervised intermediaries has the potential to exclude those citizens classed as 'unbanked'. In particular, we cannot force individuals to trust custodians to hold their money. Further research is required on the inclusion of vulnerable groups and their participation in a digital euro, especially as many will be reliant upon state benefits and assistance.

A digital euro may allow banks and other entities to offer additional services, on top of simple payments, which could benefit citizens and businesses. What services, functionalities or use cases do you think are feasible and should be considered when developing a digital euro?

(213369)

Type: (T/text-long)

Allowing citizens to budget their money by being able to ring fence euros towards savings, utility bills and 'rainy day' funds. This is to ensure that customers can use digital euros with the flexibility and familiarity of use offered by cash.

The recoverability of lost keys or digital wallets for customers will not be possible in the general case, although there might be service providers or social backup mechanisms that can help.

What requirements (licensing or other) should intermediaries fulfil in order to provide digital euro services to households and businesses? Please base your answer on the current regulatory regime in the European Union. (213370)

Type: (T/text-long)

Intermediaries must be subject to the rules of Payment Institutions (PIs) as defined in the PSD.

Which solutions are best suited to avoiding counterfeiting and technical mistakes, including by possible intermediaries, to ensure that the amount of digital euro held by users in their digital wallets matches the amount that has been issued by the central bank? (213373)

Type: (T/text-long)

Every transaction should preserve certain invariants that will ensure that the aggregate amount of money held by private wallets is known and changes only in a manner that is subject to regulation. The methods for verifying that these invariants are held must not involve monitoring individual digital wallets. In particular, measures must be taken to ensure:

1. that non-custodial wallets must not be expected to carry persistent identifying information such as a unique identifier or address that would be associated with multiple transactions,
2. that non-custodial wallets must not be expected to reveal information, including keys or addresses associated with previous or subsequent transactions, that can be used to identify their bearers, owners, or sources of funds,
3. that the obligation to identify the counterparties to a transaction can only be imposed at the time of a transaction, and that the process for providing information to the requesting banks or money services businesses for the purposes of recordkeeping or reporting must not involve the non-custodial wallet itself and would be carried out only with the consent of both counterparties.

What technical solutions (back-end infrastructure and/or at device level) could best facilitate cash-like features (e.g. privacy, offline use and usability for vulnerable groups)? (213377)

Type: (T/text-long)

Financial, payment and technology professionals' perspective (15794)

What should be done to ensure an appropriate degree of privacy and protection of personal data in the use of a digital euro, taking into account anti-money laundering requirements, and combating the financing of terrorism and tax evasion? (213382)

Type: (T/text-long)

Current digital payment systems, compared to cash, offer a stronger regulatory touch point for anti-money laundering and counter-terrorism financing authorities, as well as tax authorities to monitor transactions. These payment methods often require strong identity verification and are sometimes legally mandated for larger-amount transactions.

As a consequence, they afford a lower level of privacy than cash. The design of a new digital payment system tends to begin with the question of how to maintain the same level of regulate-ability with existing digital payment mechanisms. How to replicate the benefits of cash in such methods appears as a secondary consideration.

The design of digital euros, to achieve its goals (especially R2: Cash-like features), should prioritise the latter question, or at least put it on an equal footing with the former one. This would entail further research into the essential characteristics of cash, for both individuals and the society, and in both economic and social terms, and the extent to which they can be replicated in a digital currency.

Non-custodial wallets offer a way to preserve cash-like characteristics in digital transactions, and the popularity of cryptocurrencies largely follows from the pursuit of privately held digital cash. The increasing preponderance of online and digital transactions must not be viewed as an opportunity to expand the scope for surveillance and control over individual persons by monitoring or restricting what they do with their money.

Fortunately, it is possible to regulate financial transactions without collecting data that could be used to profile the behaviour of individual persons. The solution proposed by Goodell, Al-Nakib, and Tasca (see below) introduces a government-backed digital currency infrastructure to ensure that every transaction is registered by a bank or money services business, and it relies upon non-custodial wallets backed by privacy-enhancing technology such as zero-knowledge proofs to ensure that transaction counterparties are not revealed.

Please refer to:

G Goodell, T Aste. "Can Cryptocurrencies Preserve Privacy and Comply with Regulations?" *Frontiers in*

Blockchain, May 2019. doi:10.3389/fbloc.2019.00004. Also available at SSRN:

<https://ssrn.com/abstract=3293910>.

G Goodell. "Privacy by Design in Value-Exchange Systems." Discussion Paper, June 2020.

<https://arxiv.org/abs/2006.0589>.

G Goodell, H Al-Nakib, and P. Tasca. "Digital Currency and Economic Crises: Helping States Respond."

LSE Systemic Risk Centre Special Papers SP 20, September 2020. Available at SSRN:

<https://ssrn.com/abstract=3622089>.

The central bank could use several instruments to manage the quantity of digital euro in circulation (such as quantity limits or tiered remuneration), ensuring that the transmission of monetary policy would not be affected by shifts of large amounts of commercial bank money to holdings of digital euro. What is your assessment of these and other alternatives from an economic perspective? (Tiered remuneration is when a central bank sets a certain remuneration on holding balances of digital euro up to a predefined amount and a lower remuneration for digital euro holding balances above that amount.) (213389)

Type: (T/text-long)

Digital currency must be cash-like and must not be eligible for re-hypothecation.

What is the best way to ensure that tiered remuneration does not negatively affect the usability of a digital euro, including the possibility of using it offline? (213390)

Type: (T/text-long)

If a digital euro were subject to holding balance limits, what would be the best way to allow incoming payments above that limit to be shifted automatically into the user's private money account (for example, a commercial bank account) without affecting the ease of making and receiving payments? (213391)

Type: (T/text-long)

A digital euro must not be subject to holding balance limits. This is for two reasons: first, the digital euro must provide to its users the same affordances of cash, and second, individual wallets must not be linked to individual persons and must not be monitor able. A digital euro is like a physical euro (i.e. it is like notes and coins), and it is not a substitute for bank deposits.

What would be the best way to integrate a digital euro into existing banking and payment solutions/products (e.g. online and mobile banking, merchant systems)? What potential challenges need to be considered in the design of the technology and standards for the digital euro? (213392)

Type: (T/text-long)

Financial, payment and technology professionals' perspective (15793)

What features should the digital euro have to facilitate cross-currency payments? (213393)

Type: (T/text-long)

Should the use of the digital euro outside the euro area be limited and, if so, how? (213394)

Type: (T/text-long)

Which software and hardware solutions (e.g. mobile phones, computers, smartcards, wearables) could be adapted for a digital euro? (213396)

Type: (T/text-long)

What role can you or your organisation play in facilitating the appropriate design and uptake of a digital euro as an effective means of payment? (213397)

Type: (T/text-long)

The SPRITE+ Future payments group are full time academic researchers based in the UK who are engaged in exploring payments system architectures, governance and social impact. The project and its members can be found here:

<https://spritehub.org/2020/08/20/future-payment-systems-data-technology-and-privacy-after-covid/?notification-cache-refresh=1>

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