

The Consumer Voice in Europe

DIGITAL EURO

BEUC response to the ECB's consultation



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Why it matters to consumers

Today the consumer has two solutions to pay: cash or an electronic payment (card, transfer or direct debit). Cash is managed by central banks, electronic payments by private banks. If cash is no longer used, all payments will be in the hands of private banks.

This is the main reason for the initiative of the central banks: to create not physical cash but digital. This new currency, if it really has the same characteristics as cash, would be an extraordinary innovation for consumers.

This document, in response to a consultation with the European Central Bank, explains how in our opinion this new currency could work.

Summary

Digital Euro: In October 2020, the European Central Bank (ECB) published a [report](#) on the possible issuance of a digital euro. As [explained](#) by the ECB, a digital euro would be an electronic form of central bank money that is accessible to all citizens and firms – like banknotes, but in a digital form (see also the following ECB [presentation](#)). The ECB has launched a [consultation](#) on the digital euro. This document first explains what a digital euro is and answers the 18 questions of the consultation.

The creation of the digital euro must be to give consumers who choose digital payments to have at their disposal a form of digital public cash. The consumer holds physical cash in their purse or its wallet, they will hold digital euros in a wallet in their electronic device such as a phone, a computer or a card. In this case the electronic monetary units will be transferred from the consumer's device to that of the beneficiary.

The creation of digital cash with direct access by consumers to an account with central banks should bring an enormous innovation. This is creating a fundamental new right to the consumer regarding the management of their money.

The digital euro should have the same characteristics as cash: cheap and easy to use, secure, risk-free, efficient and more importantly anonymous.

The digital euro must be set up in a way that ensures that private actors such as payment providers are incapable of processing personal data. The core feature of cash transactions, which is anonymity, should be transferred to the digital euro. Privacy by design is an issue where the central bank should take a stand for anonymous payments.

What are CBDC and digital euro?

CBDC means Central Bank Digital Currency. This means money issued by a central bank. In the euro area, the central bank money is the currency issued by the European Central Bank. The ECB consultation paper is to create a third form of ECB central bank currency that the paper denominates "digital euro". We shall use this term in the present document.

The main question all along this document in the consumer perspective is the following: 'should the digital euro be only account-based or a bearer instrument'? If it is an account-based solution the ECB or an intermediary to be defined will move digital euros from one account to another on the consumer's behalf as would happen between two standard bank accounts. Cash on the contrary is a bearer instrument. The consumer holds physical cash in their purse or wallet. If it is cash like digital euros, consumers will hold digital euros in a wallet in their electronic device such as a phone, or a computer or a card. In this situation the digital euro is an electronic surrogate for coins and banknotes¹.

The digital euro is a digital representation of money issued by the central bank. As it is public money, it will be risk-free as the liability remains on the central bank. In practical terms, it means that the value of the physical or digital cash is unchanged over time (i.e., one euro today is worth one euro tomorrow, be it in the form of cash or digital euro). There is no risk that the account-keeping establishment will go bankrupt and therefore that consumers will lose the amounts deposited.

Deposits with commercial banks are protected in the euro area by deposit insurance schemes to a maximum of 100,000 euros for a given bank for several accounts. It is not guaranteed at all that this mechanism will work in case several major banks go bankrupt. The 2009 banking crisis has been paid for by citizens through their taxes, not through banks' capital. In addition, not all accounts are protected, at least for the time being, when they take the form of crypto-assets used as payment instruments.

As explained in our [position paper](#) on crypto-assets, Bitcoin is neither a currency nor a crypto-currency. Bitcoin is only an asset of which the value is attributed by supply and demand on the market. When it is used for payment, it is some kind of barter. There are no similarities between digital euros and Bitcoin (which is not the case with Libra, now Diem, see below).

A digital euro will be created and destroyed only by the central bank and exchanged at par (one euro means one euro be physical or digital) with funds coming from consumer's bank accounts. Like banknotes and electronic money, holders would be able to use it 24/7 and 365 days per year.

Two kinds of digital euro are in the pipeline: a wholesale digital euro, designed for large-value payments and which could only be held by financial institutions authorised by the central bank, and a retail digital euro, for use by the general public. In wholesale projects, access to digital currency would be limited to banks and other financial institutions, and the aim would be to make payment flows within the existing financial system faster and cheaper. In retail projects, CBDCs would be issued through what could effectively be accounts at a central bank for the general public or accounts held by intermediaries such as commercial banks working with the central bank. This response presents BEUC's opinion related only to the retail digital euro.

¹ Terminology used by the first eMoney directive (2000/46/EC) recital 3.

Digital euro is a third form of central bank currency in addition to cash and reserve accounts. Only banks, suppliers of market infrastructure, and governments may hold reserve accounts with the central bank. In effect, they already have direct access to central bank money. Those types of accounts cannot be held by consumers. The creation of digital cash with direct access by consumers to an account with central banks should bring an enormous innovation. This is creating a fundamental new right to the consumer regarding the management of their money. Another form may be through indirect access through use of intermediaries, which could be less innovative depending on the nature of this intermediary.

The term "token" is very often used to define digital cash in an electronic wallet. This term is ambiguous, as it is also used for other aspects in payments, for example the tokenisation of a card payment for security purpose. Therefore, in this response document we shall sometimes use the idea of "electronic monetary units" to define digital euros stored in a wallet.

The creation of digital cash with direct access by consumers to an account with central banks should bring an enormous innovation.

There are two reasons linked to the sovereignty aspect of the euro which also explain the ECB proposal.

The first is Facebook's Libra proposal, which has sounded like a wake-up call for all central banks. Today, 80% of the world's central banks are working on CBDC projects. If the Libra project sees the light of day, it is a private digital currency that can take the place of central bank currencies. The Libra project has changed, even in name, since it is called DIEM and is based solely on the dollar at par value. This project is scheduled for early 2021. If the US authorities let it happen, we could witness a huge development of transactions in dollars in the world.

The second reason is competition between central banks. As stated in scenario 6 of the report: "*The issuance of CBDCs by major foreign central banks could enhance the status of other international currencies at the expense of the euro*". If the central banks of the United States (FED) or China launch their CBDCs, in some countries we could see a 'dollarisation' or 'yenisation' of the economy. The euro zone cannot afford such a development.

User perspective

We want to find out how people in the euro area would use a digital euro. We also want to understand the ways in which a digital euro could complement the existing payment methods you use. Your responses would help us design a digital euro that meets the needs of a broad range of users

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

I want to be able to pay even when there is no internet or power connection.
I want my payments to remain a private matter.

I want to be able to use it with my smartphone and at payment terminals.
I want my transactions to be completed instantaneous.
I want to use a digital euro without having to pay additional costs.
I want it to be a secure means of payment.
I want it to be easy to use.
I want to be able to use it throughout the euro area.
I want it to take the form of a dedicated physical device.

Sub question 1 Do you have any further comments about the ranking that you have indicated above?

The opinions and behaviour of consumers are different when it comes to the use of cash. Some prefer to use physical cash when others refuse its use and only make digital payments. This diversity must be maintained. Therefore, BEUC is very satisfied with the new [commitments](#) made by the ECB end of 2020 that the creation of the digital euro is in no way a step towards the disappearance of physical cash.

The creation of the digital euro must be to give consumers who choose digital payments to have at their disposal a form of digital public cash.

It is why this ranking is determined by the idea that the digital euro will be a payment instrument that the consumer carries with them (bearer instrument) on which the electronic monetary units are stored and not simply based on an account (account-based instrument) that requires an internet connection at the time of the transaction.

In this logic, this classification prioritises the aspects that make the difference between cash and traditional digital payments, i.e., resilience and privacy. The others are important but are not specific to the digital euro.

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

There are many challenges that could deter consumers from using the digital euro.

The very first is probably the protection of privacy. The use of physical cash is a determining element regarding privacy. If the digital euro does not offer this protection, cash users will continue with the physical euro.

Safety is also an important dimension. Even if the digital euro is central bank money, the theft of electronic monetary units held in the consumer's device would result in a loss for the consumer equivalent to banknotes when a physical wallet is stolen. Total security does not exist, but the system should be built in such a way that that kind of hacking should not be possible.

The cost of transactions is also a factor of reluctance. The increasingly important costs associated with the use of cash are very poorly accepted by consumers. It should therefore be foreseen that the digital euro is a public good with lower costs than for other payment instruments.

Another aspect is convenience. If consumers find digital euro too complicated, they will not use it. As the digital euro is a pure equivalent of the physical euro, conversion between the two types of euro must be possible at any time. Any obstacle to this passage from one to the other would be a blocking factor.

3. 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?

It is necessary to distinguish between different categories of consumers to answer to this question:

Digitally illiterate;
Economically excluded;
People with disabilities.

Regarding 'digitally illiterate' people, the answer is in the domain of convenience. Not all consumers are able to manage a wallet in a mobile phone. Some consumers even don't have a mobile or only a mobile without an internet connection. Simple solutions should be found.

The economically excluded are those who do not have a bank account. Alternative solutions are needed. For the time being, those consumers use only cash and sometime prepaid cards. It should also be possible for those who do not have a bank account and therefore are not financially included to have access to the digital euro as it is the case with prepaid cards and the basic bank account.

As regards persons with disabilities, the new legislation related to disability covers also various aspect of payment. Those features should of course be applied for the digital euro.

4. 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):

- a. a digital euro focused on privacy and the protection of personal data, which can be used offline.**
- b. a digital euro with broader potential for additional services, allowing innovative features and other benefits for citizens and businesses.
- c. a combination of both.

Sub question 4: Do you have any further comments regarding your answer to the question above?

This question should have been the first one as the answer on this point generates the answers to the previous questions: should the digital euro be account-based or a bearer instrument.

If it is an account-based solution the ECB or an intermediary to be defined will move digital euros from one account to another on the consumer's behalf similarly to as between two classic bank accounts.

Cash on the contrary is a bearer instrument. The consumer holds physical cash in their purse or wallet, they will hold digital euros in a wallet in their electronic device such as a phone, a computer or a card. In this case the electronic monetary units will be transferred from the device of the consumer to the device of the beneficiary.

As already explained, the bearer instrument is our preferred choice. The functioning of this instrument will also need the opening of an account by which the scriptural money (the funds that the consumer holds on their bank account) will be transformed in digital euros and vice versa. But the consumer should be able to transfer these digital euros from the account to the device they are using.

Financial, payment and technology professionals' perspective

We want to hear from experts working in the financial and technology industries so that we can assess how a digital euro could be provided safely and efficiently. We want to make sure that its design would not inadvertently constrain industry-led solutions aimed at providing additional features or services which might also benefit citizens. We would also like to understand what role you or your organisation could play in facilitating or encouraging the use of a digital euro as an effective complement to cash.

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

In the foreword of the ECB report it is stated, on page 3, that the ECB will work on the issue of digital cash "to ensure that consumers continue to have unfettered access to central bank money/.../ in the digital age". Implicitly, such a statement is recognising that the only central bank money to which consumer have access, nowadays, i.e., cash, is not unfettered. For consumers, access to cash is more and more complicated. BEUC has published a [position paper](#) explaining these concerns and proposing solutions.

From the moment a bank manages several means of payment, it does not establish its prices only on their cost but above all on its commercial policy and in particular the instruments that it wishes to favour while taking into account what the competitors do. What would happen to the management of the digital euro if the bank has total pricing freedom in this area? This is why we are reluctant to give banks the same role for the management of the digital euro, be it account-based or bearer-based as for physical cash today.

In addition to fees, we see two other issues:

What about privacy? We need to be sure that the blocks (if blockchain technology is used) cannot be seen by the bank or any intermediary. If on the pretext of anti-money laundering banks have the knowledge of the detail of the transaction, consumers will not see the difference with a classic payment, be it instant credit transfer or card.

What about social exclusion? Some consumers do not have a bank account or are even excluded by the bank. How can we ensure that these consumers will have access to the digital euro?

In its document, the ECB indicates that it does not have the capacity to directly process the management of the millions of accounts of individuals denominated in digital euros. In this case, why not consider the creation of establishments dedicated to this activity which would be more or less subsidiaries of national central banks. This would avoid the conflicts of interest inherent in the simultaneous management of private and public means of payment.

If the goal is to provide an instrument with cash-like properties, then privacy by design and by default is an issue where the central bank should take a stand for anonymous payments.

6. 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?

We do not see to which additional services this question is referring.

In term of functionalities, the main issue is legal tender. Will the digital euro have legal tender as physical cash? Unfortunately, there is no EU definition of legal tender, this rule has been left to each Member State. Recently, the Eurosystem has [announced](#) a new policy regarding the acceptance of cash. Eurosystem considers the "universal acceptance of cash to be a vital part of the payment system" and add "Public service providers, traders and other businesses cannot refuse cash payments, unless explicitly required by law or where all parties have previously agreed on other means of payment." So the issue here is to know if the digital euro will have the same legal tender statute as physical cash.

7. 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.

As explained in our answer to question 5, our preference goes towards a network of dedicated intermediaries. If the solution adopted is based on the existing payment services providers (PSPs), particularly banks, the ECB must guarantee that the intermediaries offer high levels of convenience, safety and service to customers.

The ECB should set up a licensing system: the ECB creates the digital Euro, licensed intermediaries acting on behalf of the ECB provide access to the digital Euro to consumers. In this solution, the ECB would strictly limit activities of intermediaries to ensure cash-like qualities of a digital Euro, most importantly: privacy and financial inclusion. The oversight of this licensing system should be attributed to the national central banks.

8. 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?

Digital euro is central bank currency. Only the central bank should be able to create or destroy units of digital euros. Any other solution sharing this right with any kind of intermediary is too dangerous and could generate a huge reputational situation.

9. 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)?

In the description of scenario n°2, related to cash decline, the report states: “ *the Eurosystem could introduce a digital euro as an additional form of public money and means of payment. In order to satisfy the needs of users, the digital euro should be cheap to use (generating very low costs for users, like physical cash), secure (providing the highest levels of fraud prevention and offering consumer protection), risk-free (its holders should not be subject to any market risk or issuer default risk), easy to use (even for unskilled consumers and merchants) and efficient (permitting fast payments)*”.

This paragraph contains the main characteristics of physical cash, except one, privacy. For privacy, see the answer to question 10.

Regarding the back-infrastructure, see answer to question 14.

Regarding, the various devices that the consumer can use and the procedure to load and download electronic monetary units using strong customer authentication, see answer to question 17.

10. 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?

The cashless society is for the time being a traceable society. In a cashless society based on private money, all payment transactions are electronic and are therefore traceable. Consumers who want to protect their privacy must be able to make cash payments so that their transactions are not listed on their payment account statement. Any person or company with access to the bank statement of the consumer can learn a lot of information about their financial and personal life by analysing their payment transactions, for example about the consumer's political and religious affiliation, sexual orientation, health conditions, personal relationships etc. This is why privacy in the field of payments is a major issue for consumers and thus a requisite for a digital euro as an alternative to cash.

All consumers are not identical but many of them have concerns about the protection of their privacy and personal data as shown notably by all the discussions about the General Data Protection Regulation (GDPR). The digital euro should be designed to cater for these preferences related to privacy and the use of data. There is a need that the digital euro restricts the use of data generated by the transactions to just that information required for compliance with anti-money laundering legislation.

The digital euro must be set up in a way that ensures that private actors such as payment providers are incapable of processing personal data for the payments except for complying with legal obligations related to fraud prevention. They should adhere to very strict purpose limitation, data minimisation and data retention policies.

The core feature of cash transactions, which is anonymity, should be transferred to the digital euro. If the goal is to provide an instrument with cash-like properties, then privacy by design and by default is an issue where the central bank should take a stand for anonymous payments.

11. 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. (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.)

What is your assessment of these and other alternatives from an economic perspective?

At the moment, only commercial banks can deposit funds with the central bank, thus transforming private money into central bank money. Consumers do not have this option.

These deposits from commercial banks are one of the instruments of monetary policy, particularly through the remuneration that it generates and involves considerable amounts.

Consumer deposits with the central bank would obviously be of a different nature. For consumers, it is an equivalent instrument to cash. The objective is to be able to make payments and to conserve cash. It is not an investment service. Under these conditions, it would be logical to provide for a maximum possible deposit amount on a digital account. Another possibility is to set up negative interest once the amount of that account is above this limit.

12. 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?

This question is much more related to monetary policy and financial stability. Regarding the maximum limit on retail accounts, see answer to the previous question.

Regarding payment transactions the situation is different, it is only when the electronic monetary units come back to the account that the issue exists...Thus, in the bearer of a digital euro's perspective, the ceiling on the account does not prevent the transactions.

13. 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?

The question raised here can be formulated otherwise: how is the consumer aware that with the new funds received, the global amount of their account, is above the authorised limit? As proposed previously, a negative interest rate could be applied for the amount above the ceiling, but the account holder should be informed immediately of this situation and decide what to do. Automatic transfers to a commercial bank account should be possible only if the consumer has given explicit consent to this kind of transaction.

14. 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?

Access solutions link end users to the back-end infrastructure and therefore are heavily dependent on the infrastructure model chosen. The ECB document gives four alternatives for this infrastructure:

- Direct access by end users to central bank accounts;
- Intermediated access by end users to central bank accounts.

These two solutions are centralised infrastructures

- Direct end-user access to a bearer's digital euro;
- Hybrid bearer digital euro and account-based infrastructure (also allowing wholesale transactions).

These two other solutions are decentralised infrastructure.

As explained previously, BEUC is in favour of a bearer instrument but of course an account is indispensable for the functioning of such a feature. The main issue remains the back-end and front-end infrastructure.

It seems that the hybrid solution is the only one able to maintain privacy. Privacy should be maintained for low-value transactions and only higher value transactions should be submitted to AML checks. We are in favour of a situation where intermediaries act as gatekeepers, that will authenticate end users through SCA; and provide the technical connectivity between users and the Euro system's infrastructure.

Why not consider the creation of establishments dedicated to this activity which would be more or less subsidiaries of national central banks?

15. What features should the digital euro have to facilitate cross-currency payments?

At the consumer level, cross currency payments are a complex issue. The alternative has long been between credit transfer and remittance money services. In recent years, fintechs have demonstrated that there are ways of considerably lowering the cost of these transfers. It is almost certain that they will use the facilities of digital euro accounts to further improve the situation.

16. Should the use of the digital euro outside the euro area be limited and, if so, how?

This question relates to the wholesale digital euro. In our logic of a bearer instrument, the digital retail euro should be limited to the euro area. Except in some countries which are using the euro without being a member of the euro area, consumers are not used to using their original currency to make payments in a country where the currency is different. At least initially and particularly for reasons of safety, this use should not be possible. In addition, there is the question of access to the digital euro by EU consumers from non-Euro countries. Will it be possible for them to access to the digital euro if for example shops in their countries are ready to accept it. It may be a starting shot for a renewed drive to non-EUR countries to enter the Eurozone.

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

To answer this question, it is necessary to differentiate between the conversion of private currency into public currency, in other words the transfer of funds from the commercial bank to the digital euro account and vice versa, on the one hand, and on the other hand, the conditions of use of the digital euro.

In both cases, a Strong Customer Authentication (SCA) will be necessary as PSD2 requires that a payment transaction be authorised only if the payer has given consent to execute it.

As explained previously, we consider that the digital euro should be a cash-like payment instrument. In this logic, it could be used from any electronic device allowing to download a wallet in which the electronic monetary units will be stored and has the possibility to generate a SCA. For this purpose, it will be necessary to provide to the consumer a secure dedicated wallet which can be used only for digital euros.

As creation, redeem and destruction of digital euro are a central bank monopoly, the SCA corresponding to these two kinds of transaction should be given to the central bank. For standard payments, the SCA should be provided to the back-end infrastructure.

18. 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?

As explained by the answers to the previous questions, BEUC believes that the digital euro can be a major innovation in the world of payments and one which can benefit consumers. BEUC brings together 44 consumer organisations which publish numerous magazines and websites which have an extremely high rate of consumer confidence. All these media will not hesitate to publish a number of articles on this innovation and explain to consumers what the advantages and disadvantages are. Consumers' choice regarding the means of payment they use is for BEUC a fundamental aspect and must be based on demand, and not imposed by the supply side.



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