

Digital Euro: use cases and design

1. The future of the digital euro must be decided on the basis of clear and compelling use cases

The Chair stated that the majority of central banks are investigating or implementing central bank digital currencies (CBDCs). Currently, the ECB is in a two year investigation phase, which will report back to the ECB's Governing Council in autumn 2023. The aim of the investigation is to explore the possibility of creating a European CBDC retail payment solution. As a central bank, the ECB wants to ensure that citizens continue to have access to central bank money in an increasingly digital age. The ECB's first, second and third progress reports provide a complete overview of the ECB's analysis of the project and the decisions it has made so far. The current phase is the holistic review, in which the ECB interacts with market stakeholders to determine whether its decisions might need to be adjusted. This conversation is only one part of the discussion taking place across Europe. With the legislation now being drafted, the political debate has started. As the digital euro will touch everybody in Europe, it is important to continue these exchanges and work together to create the best possible version of the digital euro.

1.1 The key success factors for developing a European CBDC

An industry speaker emphasised that this is an important moment to explore the issues around CBDCs. The G7 principles were a significant step forward and established some very important guardrails. The principle of 'do no harm to financial stability' is an important anchor point to avoid the financial disintermediation possible with a completely unfettered CBDC. The G7 principle of competition and innovation is also important. There are 'dos' and 'do nots' in this regard. In a digital world, it is important not to create a single point of failure. If something happens to a particular infrastructure, consumers and businesses need to be able to switch to a different payment mechanism. Resilience is important both within a particular infrastructure and systemically. Therefore, the infrastructure of the digital euro cannot be isolated. In Visa's view, the principle of competition and innovation requires the use of existing infrastructure. Otherwise, the digital euro will not have the platform or the standards to bring in other players.

Much of the debate focuses on use cases, but central bankers are not the best forecasters of the future. If central banks create platforms and standards, innovation will create use cases. As the economy moves away from the cash world, it is important to remember that fiat currency is defined as a store of value, a unit of account and a means of exchange. In a digital world, the 'means of exchange'

piece becomes incredibly important. There are three prerequisites to creating a credible means of exchange. The first is security and resilience. A digital currency has to have the availability and security that citizens expect. Equally, citizens must be protected against fraud. All of the parties involved should participate in that protection. If one party in the system is the sole owner of fraud, that will create moral hazard and risk. Cybersecurity is the other important element of resilience in the digital space. The second prerequisite is value. The digital euro must create value for end users and merchants, and the use cases should take account of value in people's lives. Thirdly, consumers must have choice. In the digital world, consumers are given options.

1.2 The digital euro can address the key issues caused by the declining use of central bank money: trust, financial stability and EU autonomy

A Central Bank official explained that there is an increasingly large gap between people's digital lives and 'analogue' central bank money. The proof of this is the shrinking use of cash. This is a risk because the convertibility of private money is important for stability and trust in the financial system. While it is clear that cash will remain, the digital euro offers an additional way for people to pay in central bank money. Sovereignty is a key topic in this conversation. At the moment, there is no widely available payment solution, usable both online and in brick and mortar stores, that offers a unique user experience, is operated on a European infrastructure and is governed from within Europe. The events of the past few years have clearly shown that dependency always comes with risk. Alternatives and fallback options are needed to guarantee the resilience of the European economy.

1.3 The main use cases for a digital euro

A Central Bank official noted that the question of use cases depends on whether the digital euro is a complement to cash or not. First, cash is something that is used in stores. E commerce is one of the main use cases because that is where people want to use cash. Secondly, cash is commonly used in transactions between individuals. These peer to peer transactions are also an important use case. Finally, it is important to remember that one use case of cash is hoarding. A large amount of cash is not used for transaction purposes but is hoarded. This function will not be one of the purposes of the digital euro.

An industry representative highlighted the importance of cross border payments. The issues that exist with cross border payments do not need to be taken into account in the initial design, but they will need to be addressed at some point. The key issues are access by non residents such as tourists and spill over effects to third countries. In some countries, the impact could be relatively strong. In this regard, it is very encouraging to see the work being done by central banks and the Bank for International

Settlements (BIS) to coordinate on CDBC's and use wholesale variants of CDBC's.

1.4 The design of the digital euro must ensure financial inclusion, guarantee user privacy and contribute to anti money laundering (AML) and fraud prevention

1.4.1 Ensuring financial inclusion

A consumer representative stated that the digital euro is a project for the people, but there are still many questions about how it will be implemented. However the project is realised, it must be tested with the people. The digital euro is necessary because of the rise of digital payments and the fact that cash is increasingly not available or not accepted. Digitalisation is one part of progress, but no one should be left behind in the transition. This need for inclusion is the main problem with the digital euro. If someone cannot pay, they are not part of society. Sweden experimented with a cashless system, but it ultimately reversed this decision. It is important not to rush into digital, as there can be downsides to moving too quickly. BEUC has received similar feedback from its Norwegian members. In a survey of Norwegian consumers, up to 25% of consumers indicated that they have had problems making digital payments and 43% of consumers said they struggle to make payments online.

A Central Bank official agreed that the digital euro can help ensure financial inclusion. The design of the digital euro should be simple, and the needs of people who are illiterate or visually impaired must be taken into account in its design. It is important to remember that there will always be a group of people who want to use cash, regardless of any questions of digital skills or privacy.

A consumer representative emphasised that people hoard cash at home because they do not trust the banking system. The number of people who want to use cash will probably increase rather than decrease. This is not a question of generation but of age. When people age, they lose cognitive skills and find it harder to adapt to new interfaces, and their fine motor skills deteriorate. Given Europe's aging population, this factor will have to be taken into account. Including the conditions of the European Accessibility Act in the rollout of the digital euro would help to ensure that people with poor digital skills or those who are less able to use a smartphone can use any identification method that is implemented.

In terms of inclusiveness, the digital euro should be legal tender and free of charge, certainly for daily services. Additionally, it is important that it is not described as a commercial project. The digital euro is a public project, even if there will be commercial intermediaries. This is one reason why people trust cash. There will still be a need for distribution by commercial intermediaries, including a dense network of ATMs and branches with the possibility of human interaction. To be properly inclusive, the project will need to target people who are not digitally skilled and who need human interaction to take part in society. Of course, this will require investment. At the moment, there is a tendency to have fewer branches and fewer ATMs. If a person cannot use digital payment methods, they are effectively out of society. Any inclusive system will need a dense network in order to enable widespread access to the entry points of the digital euro.

1.4.2 Guaranteeing user privacy

A consumer representative suggested that a consumer centric digital euro would protect privacy in the same way as cash. As a consequence of digitalisation, different industries hoover up people's personal data. This data is not always kept within an industry. In this way, people become commodities. This should be prevented.

A Central Bank official stated that privacy is a key reason why people use cash. Cash gives people more privacy compared to transferring funds from one bank account to another. The fact the digital euro is being provided by the authorities will not necessarily make it more acceptable to the public. Privacy has been one of the big issues in the debates about the digital euro in the Dutch parliament, and it is going to be an issue across Europe.

A Central Bank official agreed that privacy for end users is a key consideration. The focus groups performed during the ECB's investigation phase demonstrated that many people care about privacy when making payments for a variety of different motives. Some commercial and digital services have proven themselves to be untrustworthy holders of private data, and many people distrust state run services. The ambition for the Eurosystem should be to have the highest possible level of privacy and data protection. This should include clear routes for minimal data use and maximum control for users. The digital euro must be constructed to ensure Eurosystem control over the ledger, and thus the amount of currency in circulation, without enabling access to data. This will ensure privacy vis à vis the Eurosystem while also reducing the risk of hack attacks against a centralised pool of data.

1.4.3 AML and fraud prevention

An industry representative agreed that privacy and financial stability are both important topics, noting that privacy was the main consideration in the ECB's consultation. It is important to remember that the existing solutions in the market provide a high degree of privacy while also enabling AML controls to be applied. The digital euro should also seek to accomplish both of these aims. Privacy will be at the core of any solution, but this must not compromise AML and fraud prevention. There is an idea about reinforcing privacy for transactions below a certain threshold, but it seems somewhat paradoxical to have a higher degree of opacity in a public solution than in a private solution. Not every aspect of cash should be replicated; the digital euro should only replicate the aspects of cash that make sense.

2. The digital euro in practice: expectations and requirements

2.1 Banks, non bank payment institutions and e money institutions are best placed to distribute the digital euro

A Central Bank official observed that people often ask whether they will have to open a digital euro bank account with the central bank. Central banks will not be doing this because they are not good at it. The European central banks have decided to distribute the digital euro

through regulated entities: banks, non bank payment institutions and e money institutions. These institutions have the right experience and knowledge to bring the digital euro to citizens. This will have several effects on these institutions, and their roles will change. The current design of the digital euro means that the financial players will play the roles they know best, such as user management, transaction management and liquidity management. User management entails the management of digital euro accounts or wallets, including the onboarding of customers, know your customer (KYC) and AML checks and the provision and management of payments instruments linked to the digital euro. Transaction management is about the initiation of transactions, ensuring that user authentication is done well and that transactions are correctly validated and settled. Liquidity management is about the funding and defunding of digital euro accounts.

2.2 The arrangements for the digital euro must preserve innovation and competition

An industry representative stated that access to payments data will allow banks and other service providers to offer greater personalisation and improve financial advice. If customers want to access these services and functionalities, they should be able to.

A Central Bank official emphasised that, alongside banks, non banks will also play a role in the new infrastructure. Today, non bank players play an increasing role in the acquiring of payments in the euro area. This should be acknowledged and fostered, and non banks should be explicitly included. Secondly, the digital euro will use public digital infrastructure, on top of which private parties can build their own innovative products and services. This will promote competition while also rewarding innovation. Finally, the digital euro should not crowd out existing players. Ideally, it will coexist with Europe's existing payment solutions. The digital euro is being launched for resilience reasons, not to make a competitive statement.

An industry representative observed that there will be a need to rely on existing and future infrastructure, especially since the use cases considered in the design overlap with existing solutions. It makes sense to exploit the synergies between the digital euro and instant payments, for example. The European payments industry should work on the interoperability of different instant payment solutions and connect these with the infrastructure being developed by the ECB. In Spain, a proof of concept has estimated the potential savings from using existing infrastructure at more than 50% of the investment cost. In addition, using existing infrastructure will enable the digital euro to be deployed at a faster pace.

A Central Bank official agreed that it would not be desirable for the digital euro to compete against the private sector. The digital euro is a complement to the private sector. There is still much to do to create a single European payments area. Happily, the European Payments Initiative appears to be taking off. It is incredibly important, but it is not a use case for the digital euro.

Another Central Bank official agreed that innovation is a key issue. The European payments industry is creating a completely new infrastructure, and it must be future proof. It should enable technological progress, innovation and a degree of competition. In this regard, it is similar to energy networks, which need to be upgraded in many countries. The challenge is about making planning assumptions about future performance needs and equipping the network with features that will realise their potential in the future. In the energy context, for example, while there are still comparatively few use cases for smart grids, the move in this direction will create the foundations for new products and services on a large scale. Equally, the infrastructure for the digital euro must be high performing and scalable. Similar to smart grids, the Eurosystem needs to ensure the digital euro's infrastructure contributes to further innovation and digitalisation in the future.

2.3 There should be a fair compensation scheme which incentivises the different stakeholders and users throughout the payments value chain

An industry representative stated that intermediaries should play a role in the scheme being developed by the ECB. The key question is about the incentives and responsibilities for public and private institutions. The intermediaries will be in charge of onboarding new customers, managing accounts, wallets, customer support, authentication, security and fraud prevention and post trade services. These functions have costs that must be compensated, which the ECB has acknowledged. The ECB's proposed compensation model contains four key principles: it should be free for individuals; intermediaries should be compensated; merchants should not extract excessive commissions; and the Eurosystem should bear its own costs. Overall, the ECB's principles are sensible and consistent. To the extent that the digital euro is free for citizens, there must be compensation elsewhere. However, it is important to define some of the concepts in the discussion. If basic services are going to be free of charge, terms like 'basic services' and 'value added services' must be clearly defined.

2.4 To avoid any disruption to financial intermediation, which could threaten financial stability and increase the cost of credit, limits on holdings should be considered

An industry representative stated that there seems to be a broad consensus that central banks should not compete with private banks when it comes to provision. The digital euro should avoid a disruption of financial intermediation and an increase in the cost of credit. This is why limits on holdings make a good deal of sense. This would be preferable to the idea of tiered remuneration. The level of the limit would have to be sufficient to cover citizens' day to day needs. The linkage of the digital euro to a bank account through a waterfall mechanism means there is no need for a very high limit. In any event, the limit must be stable. If the limit and the procedure for setting it were easily alterable, it would introduce uncertainty into the scheme.

3. Barriers to success: outstanding challenges to implementation

An industry speaker outlined the key aspects of the digital euro project: it is core to national life and values, conceptually very hard and technically very difficult. As the G7 principles are translated into targeted outcomes, it is important to understand whether the project has solved these three challenges. Visa welcomed the very detailed work being done by the ECB and the level of engagement that is taking place between the public and private sectors. Clearly, no one institution has the answer to all of the key issues; it is important that everyone contributes to the project.

A Central Bank official highlighted the importance of trust. If there is no trust in the digital euro, it will be a failure. Citizens trust their bank notes. This project will require engagement with the public, but it will also require a proper consideration of the issues. If it is rushed, the digital euro will not succeed.

A Central Bank official agreed that trust is a key success factor, alongside a sound legal underpinning. There needs to be a very smooth and user friendly onboarding process and a very thorough communication campaign aimed at end users and merchants. The digital euro should be treated as a digital bank note, which means it should be free for basic use and usable offline. Mandatory acceptance through legal tender status is also very important. Finally, there needs to be common European branding to ensure that any digital euro is recognisable.