

Digital Euro: features and challenges

1. Challenges of adapting central bank money to the digital age in EU retail payments

The Chair noted that, in October 2023, the European Central Bank (ECB) and the national central banks of the eurosystem successfully completed the two-year investigation phase of the digital euro project. The eurosystem is now preparing for the possible issuance of the digital euro as a digital means of payment to meet changing payment preferences among European citizens. Internationally, many central banks are considering central bank digital currency (CBDC) as a way to adapt central bank money to the digital age. The eurosystem is a pioneer in this area.

1.1 The ECB follows a step-by-step approach in order to achieve the most appropriate design for the digital euro

A Central Bank official reported that the digital euro preparation phase had begun in November 2023. This phase will focus on further developing and testing the digital euro in line with the choices made in the investigation phase. Extensive analysis, testing, experimentation and stakeholder management is being carried out to ensure that the digital euro meets the highest standards of quality, security and privacy. The governing council will be updated by the end of 2025 and will decide whether to move on to a next phase

A draft digital euro scheme rulebook has been produced and will be instrumental in ensuring a smooth implementation and payment experience throughout the euro area. Tenders have been issued to select potential providers for the parts of the digital euro ecosystem that need to be provided by the eurosystem. Design of the digital euro will include consideration of privacy and offline functionality features, but also ensure that the digital euro is accessible. In June 2023, during the investigation phase, the Commission published draft legislation. The ECB is working on the digital euro in parallel with the work of the co-legislators and supporting them on a technical level, for example by providing a technical analysis on multiple accounts.

1.2 Understanding the conditions for an effective adoption by both citizens and merchants is essential

An industry representative observed that adoption of a payment solution must be approached differently on the payer side and the merchant side. However, it is a 'chicken and egg' situation: if the consumers do not use it, the merchants will not offer it; if the merchants do not offer it, the consumers will not use it. From the perspective of the merchants, any payment method must be accepted by the majority of users for it to be a success. The payment method must be easy to integrate

with current systems and simple to use in the checkout process so that consumers feel comfortable. Cost is a key factor as merchants want the least possible cost for the payment methods that they accept.

On the consumer side, timing is crucial. Consumers need to be presented at the right time with the perfect product that meets the market demand and is state of the art in terms of trends on digitalisation. The next one to three years will be key to moving customers from plastic cards to digital wallets. Merchants will need access to a low-cost product. Any solution must be simple to install. For example, installing customer authentication on a new phone is complicated so this process must be streamlined. The more steps there are to install, the higher the dropout rate will be. The solution must be easy to use and should not result in embarrassment in a shop when the user wants to pay for something.

An official highlighted that it will be important to clarify to the public that the digital euro is not meant to replace cash, although theoretical and strategic planning must consider the possibility of a digital society with no cash. In the Nordic countries cash usage has possibly reached its lower limit and there is an indication that people still want to have a minimum level of cash. It is not yet certain what the digital euro will be a substitute for. It could replace part of the card business, insert itself into the wallet or be something else entirely. The approach should be nimble. The payment service providers (PSPs), banks and the acquisition side will all need to be engaged to achieve the necessary momentum. Common governance will need to be built in the coming months or years.

1.3 Clarification of the most appealing or sensitive features of the digital euro will be essential

A Central Bank official reported that knowledge about the digital euro outside the financial sector is extremely limited. Several individuals have asked what the exchange rate between the digital euro and the euro will be. This illustrates the current level of knowledge outside the financial sector and how people perceive the digital euro. The first task will be to explain the basics of the digital euro. Experience suggests that how this is explained will also matter greatly. Merely stating that the digital euro will be digital cash creates more confusion. The digital euro will need to be explained to the audience in an appealing way.

Individuals outside of the financial sector often ask why the digital euro is needed when other means of payment are already available. One reason is that Europe needs strategic independence. This argument resonates well with professionals, but it is less likely to encourage someone to download the app and onboard onto the app. A good go-to-market plan will be vital. The usual go-to-market plan from central banks is that they state what must be done, but this approach will not work for

the digital euro. A strong action plan will be needed to convince people to move away from their current habitual means of payment. This will be a difficult task, but it presents an opportunity.

An official commented that the compensation scheme is key not only for the active participation of the financial sector but also for merchants. Merchants need to have a positive approach towards this new means of payment, especially because they would have no choice but to accept digital euro payment transactions given its legal tender status. In Italy, convincing merchants to accept electronic means of payment, such as credit or debit cards, for paying for a coffee or a taxi was challenging, but it has been done through a mix of policy measures, even with cashback, and no one now complains any longer. From a political point of view, if merchants understand that the digital euro leads to more competition and thus reduces the cost of the merchant fees, the digital euro would be more easily accepted.

Thus, a good marketing strategy will be needed. When Libra was announced in the summer of 2019, there was a realisation at the ministry that central banks needed to consider an alternative. However, there was also an acknowledgment that the central banks might not have the same marketing capacity of Big Tech to make the product 'sexy'. Another selling point for the digital euro is that it could play an important role in financial inclusion. The G7, under the Italian presidency, is focusing on this. The CBDC handbook produced by the International Monetary Fund (IMF) also includes a chapter on CBDC and financial inclusion.

The Chair acknowledged the need for an extensive marketing plan closer to its potential issuance aimed at the wider public.

An industry representative advised that the marketing of the digital euro will need highlight its relevance. The digital euro will go deep into the European society to provide in the last mile.

1.4 The impact on the banking sector must be anticipated and clarified to enable banks to play their role as facilitators.

An official emphasised that the Italian treasury fully supports the digital euro project. The digital euro is a collective project, and the public and the private sector must collaborate to ensure its rapid take-off. Buy in will be needed from the private sector, and not just the financial sector but also the merchants. Acceptance and understanding will also be needed from the general public. The financial sector would need to act as a facilitator. In this respect, it is useful that we have gone beyond the initial reaction of the financial sector, which was that the digital euro will be disruptive and that there will be a substitution effect with bank deposits. The explanations provided by the ECB and the legislative proposal have to some extent assuaged these concerns. since we know that there will be a well calibrated individual holding limit and that the substitution effect will likely not happen. This is well known and is being addressed, so is not a big issue.

2. The digital euro is expected to help close the digital gap and will also enable the next innovation step

An industry representative commented that the digital euro project is a potential sandbox for the future European digital society. The digital euro project is happening at a moment of convergence between physical and digital and digital services and financial services. The digital euro is important for a number of reasons, the first being the digital gap. The introduction of electronic ID in Italy was initially very difficult but then developed well during the pandemic. Now everybody in Italy has a digital ID. The digital euro is a similar project. Every European citizen must be engaged. Companies are interested in a tool that is easy to develop and is helping to close the digital gap. The proposed legislation states that postal offices will deliver the service of digital euro to non-banked Europeans. 4%, or roughly 30 million, of Europeans are still not banked. The digital euro will enable companies to provide new services using wallets.

From the citizen European perspective, digital and financial education should be aligned. The population includes digital natives and digital ghosts, who are the people more advanced in age who need more basic information. However, this more basic information can also be needed by digital natives in the younger generations. Younger generations can have a an overly simplistic approach to technology, believing that they can simply go on a trading platform and become rich. The digital euro is a currency and an element in reducing societal fragmentation. Champions will be needed. There will need to be capacity for cooperation between public and private institutions. Champions need arenas in which to operate, so a sandbox must be provided where the digital euro and other new solutions can be tested. This can become an ongoing forum in which the champions can continue to work together. The Financial Stability Board secretary general has spoken about a tokenisation revolution. This will likely be the next development and will transform how financial services operate and how any kind of service is supplied to citizens.

An official remarked that new initiatives must be interoperable. A merchant that will accept European Payments Initiative (EPI) must also be able to accept a digital euro and vice versa. The same approach must be taken with other current initiatives with Bizum and others.

3. To contribute fully to Europe's strategic autonomy, the digital euro needs to be carefully positioned in the landscape of payment methods and infrastructures

The Chair noted that the digital euro will create a new European infrastructure that uses real-time processing

and provides an independent basis for payment transactions.

An official commented that the digital euro project is still at an early stage. Public private cooperation will be needed for the design and potential operational deployment of the digital euro. The place of the digital euro in the broader landscape of all the payment means and payment infrastructures must be better defined. In some segments, Europe is lacking strategic autonomy. In the card segment, the market is fragmented. Big schemes that are European but with a US base are the ones that are truly pan-European. Instant payments will likely have a smooth rollout, because the payment from account to account has been a pan-European success, with public-private cooperation and SEPA standards from the outset. This should not be forgotten. Regarding tokenisation, the threats to strategic autonomy are very real on the wholesale issue. Work on this and on retail must occur at the same pace, with the possibility that someday the two will connect.

4. The digital euro should contribute to a reduction in fragmentation at both EU and global levels

An industry representative observed that there are a variety of different payment systems and methods at the global level and at the European level. ECB documentation makes a distinction between non-systemic and systemic payment systems. At a global level, coordination and creation of a common platform or interoperability across platforms is needed. At European level, the solution should be integrated with existing platforms, especially the ones that are not necessarily located in Europe. Regulators will be key to the success of any platform. The rulebook of the digital euro will need to build a platform that is cohesive and interoperable.

A Central Bank official acknowledged that the markets in Europe are still fragmented. 13 out of 20 countries do not have a national solution and are fully based on international schemes. This limited competition has resulted in a reported increase of the average net merchant service charge from 0.27% to 0.44%. Retaining sufficient competition within the European landscape will strengthen European autonomy. The digital euro can be instrumental in this.

5. Key success factors for rolling out the digital euro

5.1 Leverage the most instructive use-cases

An official suggested that the possibility to travel across Europe and to use the digital euro for any basic need and in everyday life situation, such as to pay for the public transport in any European city, would be a powerful use case. This would clearly demonstrate to people how useful the digital euro is compared to other

private means of payment: currently, for example, you cannot use the same payment card to access every subway in Europe because the local administration might have a different private payment provider. Conversely, the digital euro will always be accepted throughout the Euro area, providing citizens with a universal and gratuitous means of payment.

A Central Bank official commented that the digital euro would be a widely accessible European electronic means of payment that would be accepted throughout the euro area, as long as the draft legislation keeps the legal tender. That is extremely important, because it means that the digital euro would be comparable to bank notes. There are differences but the characteristic of being able to pay everywhere in the eurozone would be the same.

5.2 The digital euro must be integrated with digital wallets

An industry representative reported that the industry has a clear go to market strategy in terms of how to get apps onto people's phones. This has been started with the EPI and Bizum. The ECB can benefit from this as, once apps are on people's phones, it will be possible to then add the digital euro. The industry's go-to-market strategy can be utilised as part of integrating the digital euro. This is an offer from the industry.

5.3 A harmonious integration of the necessary infrastructure and regulations should allow clear communication limited to the essentials

An industry representative stated that the entire infrastructure will be needed on day one. A clear approach to explaining the digital euro is crucial, but the less that needs to be explained the better. Cash does not need to be explained and there is no reason why the same should not be true for digital cash. The approach to rolling out a digital euro should be very simple. The rulebook is essential for every payment scheme. A eurozone-wide merchant network will solve many of the problems outlined earlier on the merchant side. The 'magic bullet' of the legal acceptance obligation will provide that network. Agreement on branding will be necessary so that it is clear and transparent for everyone that the digital euro is available and that it is possible to pay with a digital euro wherever the user chooses to.

5.4 The objective is a reassuring level of privacy adapted to each use case of the digital euro

An industry representative observed that, from a political perspective, a promise of increased privacy for the digital euro will be needed. However, an offline solution will not be necessary on day one. Privacy can be increased through political decisions and legal frameworks. There already is a sort of privacy, but there are conflicts in the legal discussions, for example regarding the Financial Action Task Force (FATF) travel rule and proximity payments at the point of sale (POS). The technical infrastructure is completely new and separate and understanding is still limited. Offline functionality is an evolution that can be considered in the next phases of the digital euro. The rulebook will be fluid and will need to be re-agreed repeatedly to be fit for purpose in the long term.

An official commented that people will need to understand that behind the digital euro there will not be any public or private 'Big Brother' and that data protection and privacy will always be ensured. Also, there is no conflict between transparency for anti-money laundering or anti-fraud purposes and the interests of the consumer and privacy. It is possible to have privacy in a system where, with very high preconditions, whenever necessary, it is possible to ex post reconstruct how money has been transferred. The possibility to differentiate the level of transparency of online and offline digital euro and/or remote or proximity payments should be discussed but relying too much on a comparison with cash is a mistake. Saying that there should be full anonymity offline because there is full anonymity in cash transactions is dangerous. Cash is a physical means whereas the digital euro is by its nature immaterial and does not have the same constraints of cash (e.g. for transportation). Different underlying means can bear different risks. Thus, the input of experts on use of money for illicit purposes would need to be sought to understand whether different technological means pose different risks. In this respect, we should not forget the experience with cash, where the €500 banknote was discontinued because the risks of illicit use were too high.

6. The novelty and complexity of the digital euro are such that setting up the legal framework for the digital euro will require in-depth debate and adaptation to the likely changes in behaviour, without creating uncertainty

An official stated that the digital euro is a brand-new project and therefore a brand new area in terms of legislation. The legal services of the Council, the parliament, the Commission and the ECB are all involved, so there will be many debates. The treaties and the primary legislation did not envisage the digital euro, so there are still some areas of uncertainty in terms of rollout, operational questions and acceptance by the public and the market, but also in terms of how to draft the legislation and how to allocate responsibilities for decisions on the digital euro. Any approach will need to evolve over time and adapt to changing behaviours.

The year spent reviewing all the aspects of the digital euro and understanding it better was particularly important for

the treasuries, which are not operational specialists in payments. The next stage will involve a more thorough investigation in terms of impact assessment and understanding the trade-offs. The ministers have asked for a design that enables 'selective privacy'. The financial stability impact will be considered by the Single Supervisory Mechanism (SSM) and the ECB.

Sufficient time should be taken to assess all aspects and ensure full understanding and engagement on the Council side. The same approach should be taken on the European Parliament side. The digital euro project concerns money and European sovereignty, so it is better to move more slowly and safely than to rush and fail. However, it is important that the digital euro project does not move too slowly and cause excessive uncertainty. At some point there will need to be clarity about the form of the digital euro, even if it still takes some years more to roll it out. Within the next 12 months, a clear message must be sent that a digital euro will be introduced, it will be interoperable, and the infrastructure will be compatible with private sector initiatives.

7. Multi-stakeholder cooperation is needed to ensure that the digital euro is properly designed, easy to market and works effectively

A Central Bank official commented that, once the industry has clarity about the design of the digital euro, the interaction between all stakeholders will be much easier.

A Central Bank official remarked that the digital euro can offer additional benefits through the digital euro rulebook and the standards that are being designed with stakeholders. All PSPs, including credit institutions and non-banks, are represented in the rulebook. The consumer and merchant organisations are also involved in the discussions about what the best standards for Europe are. Once these standards are rolled out, they will be open standards that can be used by all, reducing the implementation cost at merchants and enabling private initiatives, on the basis of the instant payment network, which provides easy access to the merchant side. The digital euro should ideally be distributed via existing payment solutions, possibly as an additional choice of payment method in an app that already exists. Sufficient time should be taken in the development of standards, but there must be enough pace to not hamper the rollout of private initiatives.