AGE feedback on items 2, 3 and 4 of ECB presentations to digital euro technical session on 6/12/22

Item 2 - End-user on-boarding and digital euro access & holdings

Before answering the questions raised at the end of the presentation, we would like to ask some clarification regarding onboarding (slide 9).

Although 98,5% of EA citizens have a CoBM account at a financial institution, it seems a bit premature at this stage to assume that most of them will chose to open their DE account at their current PSP. If PSPs are expected to compete with each other on their DE offers, it is important that onboarding with a PSP to which a customer is not known should not involve a very heavy KYC process. Will the existing default onboarding process that PSPs will have to apply when they do not know the applicant be the current simple KYC process (recording relevant data on the unknown user’s identity and verifying his/her identity)?

• What are your considerations with regard to one or multiple digital euro holdings per citizen?

AGE agrees with the current proposal to limit to one DE holding per citizen in the initial phase. If unique identification numbers are used to ensure that a single citizen can only open one DE holding, this will work for the vast majority of EA residents (regardless of their citizenship) and non-resident EA citizens who hold a DE account at a PSP located in the EA.

But we do not see how this will prevent in practice a single individual from opening and using more than one DE holding for ex. using the unique identification number of a dependent relative (child, older parent) or through money mules.

• What implications would you see of a zero holding limit for merchants?

If merchants have a zero holding limit at the end of the day and their holdings are converted in COBM at short intervals, will it still be possible for them to refund customers in DE for returned goods or pre-dispute settlements when the transaction was done in DE? Usually merchants refund customers using the same payment means and we can expect that customers who have paid in DE will want their refund to paid in DE as well.

If merchants are allowed to have several holdings, will they be able to refund a customer from a different holding than the one on which they received the customer’s DE payment? Can the desk dealing with returns and disputes be allowed to keep enough DE in their holding to ensure they can refund customers including those who come at the opening hour (when all merchant’s holdings are expected to be empty)?

• What are your considerations around the staggered approach for access to the digital euro holdings?

We agree with the proposed staggered approach but wonder if it is enough for none (E)EA-residents to have a EA based PSP, what measures will be put in place to ensure that the digital euro will not be used for store-of-value purposes by third countries residents.

• What are your considerations regarding the need for portability and the proposed implementation?

For customers being able at any time to move their DE holding from one PSP to another is crucial. The online end user interface should support a fast and easy porting from the initial
PSP to the new PSP. If the new PSP does not know the end user and needs to apply a KYC check, the end user should continue to have access to their DE holdings until the PSP completes the KYC process and the holding is processed.

Easy and fast portability is welcome, but should be implemented in such way as to ensure that no third party can fraudulently request to move a DE holding to another PSP (porting request to be authorised by the DE account holder through a two-step authentication process?).

**Item 3 on core, optional and value-added services**

- *Do you foresee any core service in addition to the ones identified or re-categorise any of them?*

  We would suggest:
  
  o Pre-dispute management and dispute management
  o Management of end users complaints about end-users interfaces
  o Reporting to the Eurosystem about end users complaints or suggestions related to the DE app
  o Reporting to the Eurosystem on end-users complaints/suggestions related to way the DE scheme is developed

- *Do you foresee any optional service in addition to the ones identified or re-categorise any of them?*

  Not at this early stage, but new optional services might be needed in later versions of the DE.

- *What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services, either via the scheme rulebook and/or back-end functionalities?*

  To ensure a harmonised end-user experience including in cross border situations across the EA, it seems necessary that all core and optional services should be defined in the scheme rulebook. This would also ensure homogenous updates across the EA.

  To ensure that future versions of the DE will take on board end-users experiences with the previous version and facilitate take-up by citizens, intermediaries should be required to regularly collect and forward end users’ complaints/suggestions to the Eurosystem. The Eurosystem could then aggregate end users feedback and share it with the DE scheme rulebook development group and Eurosystem committees to inform follow-up work.

**Item 4 on dispute management processes**

- *View on the need of dispute management processes for a pan-eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e-commerce?*

  For us it is essential to have clear dispute management processes in place for the launch of the first version of the DE to build trust in the DE and ensure that end users who wish to
dispute a transaction they made in DE will know how to proceed and enjoy the same support from their supervised intermediary as they would from their PSP when making payments in CoBM.

The DE dispute management processes should be complementary to the existing national and EU dispute resolution tools which aim to provide support and enabling tools to both parties in disputes between consumers and traders.

The DE dispute management processes will have to deal with issues that are specific to the DE design, notably the privacy elements of DE transactions and the fact that the DE is expected to be designed to be accessible to all including end users with low or no digital skills and those who are not using a smartphone to make DE payments.

The European online dispute resolution (ODR) platform is a great help for consumers trying to access their right to get reimbursed/compensated, in particular in cross-border situations or in specific domains where consumers rights are protected by EU law (Air passengers rights, guarantees and returns within 14 days, etc.) The European ODR however uses multifactor authentication which makes it impossible to use for non-digital consumers. The DE dispute management processes should include a specific user-friendly/accessible option to dispute a DE transaction for DE account holders who do not use a smartphone or have low/no digital skills.

Current dispute management processes request consumers to share personal data that are not part of the data elements which will be transferred all along the payment chain of a DE transaction. It is not clear for us what personal identification data will need to be transferred to deal with the 3 steps of dispute management (pre-dispute exchanges, dispute resolution and, if the two first steps failed, arbitration).

The DE dispute management processes should deal with both online and offline transactions in the 3 prioritised use cases (P2P, POS and e-commerce), and be designed to allow further use cases in the future (public authorities).

The DE end users dispute management interface should be as user-friendly and accessible to grass-roots consumers as possible. This implies that the consumers interface and supporting documents must be available in the national language(s) of the EA country where their DE supervised intermediary is located, and information about the DE dispute management processes should be provided to potential applicants and onboarded end users.

- **View on the role of the Eurosystem vs. the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?**

In our view option 3 is the most appropriate to ensure a harmonised end user experience across the EA including for cross border transactions.

- **Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?**

Intermediaries should report on the main complaints behind disputes.

To keep improving the delivery of a DE that meets the needs of citizens, it would be useful for the Eurosystem to regularly analyse the root causes of end users’ complaints leading to disputes and assess whether they relate to the way the DE elements are defined in the
rulebook (issues to be addressed by the Eurosystem in consultation with the DE scheme rulebook development group) or to the way end users interfaces have been designed by supervised intermediaries (issues to be addressed by intermediaries).

We feel therefore that the Eurosystem has to be operationally together with intermediaries, and option 3 is the best option to share roles if issues arise when implementing DE dispute management processes.
1. End-user on-boarding and digital euro access & holdings

General comment (no corresponding question): In the slides, it is mentioned that the holding limits are set close the launch of a digital euro. BEUC agrees that the digital euro should be an equivalent to cash and not a saving account. It thus makes sense to prevent consumers to hold high amounts of digital euros. It should be noted that the decision whether to set holding limits is closely interlinked to the privacy settings of the digital euro:

As noted by the European Data Protection Board, “the introduction of holding limits would affect the rights and freedom of data subjects by requiring additional data collections and controls.”¹ In addition, as noted in BEUC’s written comments on the technical session of 1st September 2022, a holding limit will oblige (at least if they wish to use their digital euro account in a convenient way) to link the digital euro account to their commercial bank account as they would otherwise risk that an incoming payment does not go through. If the consumer rejects linking the digital euro account to a commercial bank account, other solutions must be available to ensure that the payment transaction can go through.

What are your considerations with regard to one or multiple digital euro holdings per citizen?
As a starting point, BEUC agrees with the proposal to allow for one digital euro holding per citizen.

What implications would you see of a zero holding limit for merchants?
No reply as the question is not directed to consumer organisations.

What are the implications for financial institutions to allow merchants to build up a position during a specific short timeframe? And what timeframe could be considered?
No reply as the question is not directed to consumer organisations.

What would be the considerations from a merchant perspective to build up a position during a specific short timeframe? And what timeframe could be considered?
No reply as the question is not directed to consumer organisations.

¹ Response of the EDPB to the European Commission's targeted consultation on a digital euro:
What are your considerations around the staggered approach for access to the holdings?

BEUC agrees with the proposal to prioritise EU and EEA citizens in the access to the digital euro with the staggered approach (Euro area, EEA, special third countries).

What are your considerations regarding the need for portability and the proposed implementation?

Two key objectives of the digital euro are enhanced privacy and financial inclusion. As regards privacy, it should be carefully analysed which data is required for the onboarding to comply with the principle of data minimisation. Data portability should be limited to the data strictly needed for the “Know your customer” procedure.

Consumers might also wish to open their digital euro account with another PSP than the one chosen for their commercial bank account to keep both accounts separate, for example for privacy reasons or because another PSP offers better services. The onboarding process should foresee this case which should not result in additional administrative burden during the onboarding process or higher costs for the consumer and should not be based on account information services (see BEUC written comments following the 4th technical meeting).

As regards financial inclusion, it should be avoided that data portability leads to the exclusion of consumers who - based on their payment data of a bank account - appear less economically attractive for PSPs. Consumers not owning a bank account should receive access to a digital euro account with the same conditions (e.g. no extra fees) as those already owning a bank account.

BEUC agrees that portability of digital euro wallets/accounts from one PSP to another is an important feature to ensure competition between different PSPs and allow consumers to switch their PSP based on the conditions offered. However, this should not necessarily be based on account information service providers. If digital euros is an equivalent to cash, why is there a need to transfer data on the payment history from one account to the next? For consumers, it should be possible to simply transfer the funds to the new account when closing the old account, if they do not wish to transfer the transaction data.

2. Core services and value-added services for the digital euro

Do you foresee any core service in addition to the ones identified or re-categorise any of them?

Core services should include all services which consumers use for daily payments, this includes paying in shops and online, initiating and receiving credit transfers, charging (digital) euros on their payment instrument, consulting the level of funds on their accounts, direct debits and standing orders. This list of core services corresponds to the features of a basic payment account (see Article 17, Payment Account Directive) and should be offered free of charge to consumers.

In this regard, “recurring payments” in the form of direct debit or standing orders should be added to the list of core services as there are widely used by consumers.
BEUC supports the development of a digital euro app by the Eurosystem and would like to see this app as part of the core services offered to consumers.

Do you foresee any optional service in addition to the ones identified or re-categorise any of them?

BEUC has expressed its concerns about integrating the digital euro into the system of open banking and open finance in its written comments on the 4th technical session (November 2022). It should therefore be questioned whether account information services need to be part of the services offered for the digital euro.

What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services, either via the scheme rulebook and/or back-end functionalities?

To ensure that the digital euro meets the objectives of financial inclusion and a high level of privacy, there needs to be detailed binding rules on the core and optional services e.g. which payment instruments must be offered to consumers, which data can be required for the onboarding of consumers, etc.

If the development of core and optional services is left to PSPs, the digital euro will look from a consumer perspective like a commercial payment method with no added value as compared to a commercial bank account.

The Scheme rulebook should foresee for each core and optional service precise requirements to design the related form factors in an inclusive way so that they can be used by consumers without digital skills.

3. Dispute management

View on the need of dispute management processes for a pan-eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e-commerce?

In cases where disputes arise due to fraud, technical errors or the non-delivery of goods and services, consumers must be well accompanied in the process of claiming reimbursement including through dispute management processes. We agree therefore that option 1 should be discarded as a non-viable option.

View on the role of the Eurosystem vs. the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

As a public payment system, the digital euro should aim for a high level of consumer protection and introduce a solid dispute management system. Experience under current payment systems, for instance credit transfers has shown that relying solely on intermediaries to solve payment disputes leads to highly unsatisfactory outcomes for consumers. In case of fraud, consumers are often blamed for having acted with gross negligence or having authorised a transaction resulting in a situation where consumers bear all the losses. A dispute resolution system which is independent from intermediaries would bring much added value as it does not allow intermediaries to decide on reimbursement cases.
themselves, acting de facto as judge and jury at the same time. We would therefore question why option 4 has been discarded as an option.

BEUC supports that the Eurosystem offers technical support for dispute management (option 3) but would like to see the Eurosystem take an even more active role in terms of dispute resolution by setting up a system which is independent from intermediaries (option 4).

**Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?**

To ensure the effectiveness of dispute resolution mechanisms, intermediaries should be obliged to participate in the dispute resolution process and to accept the result (e.g. reimbursement obligation to consumer in case of fraud).

As regards slide 4, further explanations should be provided why the Eurosystem will not take any financial liability vis à vis the end user. Naturally, the Eurosystem should not be held liable for mistakes done by intermediaries but in the (rare) cases where technical errors in the settlement cause the mistake, consumers should be able to get reimbursed.
About the EACB:
The European Association of Co-operative Banks (EACB) is the voice of the co-operative banks in Europe. It represents, promotes and defends the common interests of its 27 member institutions and of co-operative banks in general. Co-operative banks form decentralised networks which are subject to banking as well as co-operative legislation. Democracy, transparency and proximity are the three key characteristics of the co-operative banks’ business model. With 2,700 locally operating banks and 52,000 outlets co-operative banks are widely represented throughout the enlarged European Union, playing a major role in the financial and economic system. They have a long tradition in serving 214 million customers, mainly consumers, retailers and communities. The co-operative banks in Europe represent 85 million members and 705,000 employees and have a total average market share of about 20%.

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The EACB welcomes the opportunity to provide input to the ECB following 5th ERPB technical session on digital euro held on 6 December 2022. The consultation covers the following aspects of the digital euro project:

1. End-user on-boarding and digital euro access and holdings
2. Core, optional and value-added services for the digital euro
3. Dispute management

The EACB’s views on the consultation questions as well as a number of questions for clarification are presented below.

1. End-user on-boarding and digital euro access and holdings

**Question 1. What are your considerations with regard to one or multiple digital euro holdings per citizen?**

- We support the ECB’s proposed way forward – there should be maximum one digital euro account/wallet per citizen, at least at the initial stage. This is important to control the amount of digital euro in circulation and to preserve the financial stability of banks. Besides that, multiple holdings would be difficult for intermediaries to maintain. In case multiple holdings per citizen are allowed, this should not impact the maximum total holding limit per citizen.

- Besides, there should be low limits on digital euro holdings (maximum EUR 500), and a limit on transaction amounts (including the waterfall mechanism). If the holding limit is too high, most consumers would be able to do all their monthly payments with digital euro, i.e. the digital euro would not be a complement but would rather compete with payments accounts with unforeseen impacts on the EU financial system.

- In addition to the question of the design of the holding limits and measures related to limit one wallet/account per citizen, the size of anonymous transactions must also be defined (protection of end-users’ privacy depends on it, thus, the control mechanisms base on it). This area, which is susceptible to fraud, must be secured with appropriate safeguards to prevent the circumvention of the holding limits and thus the unforeseen outflow of liquidity from banks.

- How to clearly distinguish between consumers and businesses? Self-employed for example, from a payment perspective, have more in common with consumers but are in fact businesses.

- To ensure only one account/wallet per citizen works in practice, in our opinion, it will be necessary to create a central register with a unique identifier using the EUDIW. Yet, there would still be the issue of citizens with more than one identity due to double citizenship.

- When a citizen intends to transfer his digital euro account to another PSP (use another PSP), it is necessary to avoid that two or more wallets are used. Will the account/wallet be closed automatically when the citizen has switched to another PSP? The definition of “account closing process” is needed. Furthermore, the
The number of transfers during a certain period needs to be limited for security reasons, e.g. only one automatic shift per month or per quarter (needs to be investigated).

- Re-use of existing onboarding data is understandable (ECB slide 9), however banks face significant costs to onboard and maintain customers. Thus, a remuneration for using these services is essential. Furthermore, onboarding requirements need to be harmonized to define a common ground working in all countries compatible with the digital euro onboarding to avoid unnecessary additional requirements.

**Question 2. What implications would you see of a zero holding limit for merchants?**

- Overall, we agree with the ECB’s proposed way forward – merchants should have a zero digital euro holding limit, although this may make intraday liquidity/balance management more difficult and costly.

- Why “automatic defunding of digital euro holdings after a short time period” if zero holding limits (ECB slide 11)? What means “short period” and down to which level (zero or a higher threshold)? In our view, that period should be as short as possible (no overnight positions) due to liquidity management concerns.

- It should be clarified whether merchants would also be able to pay with/receive digital euro on their own, e.g. their suppliers, and/or receive digital euro payments from corporate customers, and/or only via PSPs/TPPs including reimbursements. In our opinion, merchants should only be able to receive payments in digital euro, except for reimbursements to customers.

**Question 3. What are the implications for financial institutions to allow merchants to build up a position during a specific short timeframe? And what timeframe could be considered?**

- The meaning of “short timeframe” has to be clarified. It should be as short as possible (no overnight positions) due to liquidity management concerns. Also, clarification is needed as to whether merchants would be allowed to make payments in digital euro during that period. In our opinion, merchants should only have collecting accounts, with the exception of refund to a customer.

- This question should be discussed with treasury experts as there might be an impact on overnight deposits, etc.

**Question 4. What would be the considerations from a merchant perspective to build up a position during a specific short timeframe? And what timeframe could be considered?**

N/A

**Question 5. What are your considerations around the staggered approach for access to the digital euro holdings?**

The staggered approach, although more details are needed of the exact definitions, seems logical. In a first phase, access to digital euro should be limited to the euro area.

**Question 6. What are your considerations regarding the need for portability and the proposed implementation?**
From a consumer perspective, easy portability of the digital euro account should always be preferred. However, a good judgement can only be made when looking at the final digital euro proposition. Transferring the digital euro account might have more implications and should also be tested against stress scenarios, or scenarios when e.g. the customer is under guardianship.

Unlimited portability within short time frame may lead to security issues and other impacts (e.g. sanction screening and embargo), thus a limitation per period of time would be needed.

What about a more “self-sovereign” approach (own backup/restore in either – encrypted - cloud or local – encrypted – storage, etc.) making the digital euro a bearer instrument, also potentially useful for offline use-case?

2. Core, optional and value-added services for the digital euro

Question 1. Do you foresee any core service in addition to the ones identified or re-categorise any of them?

The EACB comments below are related to core services from a scheme perspective.

- Dispute management between the scheme participants should be part of the core services right from the beginning and supported by the digital euro scheme. However, clarification regarding several pending questions is needed before deciding on this point, e.g. governance of the digital euro scheme, whether the scheme participation will be limited to PSPs or be open to non-PSPs such as merchants. In our view, only PSPs should be scheme participants.

- Other possible core services from a digital euro scheme perspective: R-messages and investigations; compliance processes; reporting internal, external and to authorities; service fee charging; NFC payments.

- Does offline functionality fall under “transaction management” items? In any case, it should be stated separately as core service.

- It looks from the slides as if the ECB sees the digital euro account as a payment account so it can use PSD2 services. We would like to have clarity, also from a legal perspective, on this.

- The ECB presentation on end-user on-boarding (slide 12) states that account portability is an important feature. We are of the view that portability is not to be seen a core service feature, hence overarching.

- Mandatory provisioning of end-user services come with significant costs. So, a decent business model for supervised intermediaries will be key.

Question 2. Do you foresee any optional service in addition to the ones identified or re-categorise any of them?

- In our view, AIS/PIS as optional services contradicts PSD2. This should be clarified for holding structure and bearer structure separately.
• Who would be responsible for the bearer-based instruments and their misuse?

• Would “confirmation of payee” service be also optional/mandatory like proposed for instant payments (see EC proposal for Regulation on instant credit transfers in euro)?

• Annex of the ECB presentation (examples of potential value-added services) is a good starting point for private market solutions. Those examples should be kept in mind for a digital euro to be open for innovation by private actors and for regulatory discussion to change the regulatory framework, which currently harms innovation in payments.

**Question 3. What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services, either via the scheme rulebook and/or back-end functionalities?**

• Building the digital euro scheme up on existing, functioning and proved infrastructure would create less implementation costs and could end up being more efficient with hindsight.

• Regarding core and optional services supported by back-end functionalities (ECB slide 7): Even if back-end infrastructure was collaboratively installed, initial costs for linking existing payment solutions (T2/T2S, TIPS, SEPA, etc.) with core features based on requirements defined by the Eurosystem are still considerable. The development of value-added services (VASs), even if left fully to the market, cannot compensate the expenditures, thus through impact assessment is needed.

• The statement that other services might be included over time should be reflected carefully (ECB slide 9). “Other services” should be developed exclusively in the area of VASs by banks.

• Optional services need to be standardized, otherwise the existing heterogenous/non-interoperable payments landscape will be replicated and will potentially foster the dependency on GAVM (Google, Apple, Visa, Mastercard).

### 3. Dispute management

**Question 1. View on the need of dispute management processes for a pan-eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e-commerce?**

• Dispute management processes for the digital euro would be needed from the beginning for disputes between the scheme participants.

• Observation related to the technical aspects of P2P transactions use cases: Problems can occur both prior to and after a transaction. Depending on the stage of the transaction, a potential breach may fall within the sphere of a commercial bank or central bank.
The answer to liability concerns will depend on which characteristics are used for or against the classification as a P2P transaction. In the end, either banks or the Eurosystem will be held accountable for any failures.

Dispute management to end-users should be left to end-user payment systems using the “digital euro inside”.

Question 2. View on the role of the Eurosystem vs. the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

- None of the proposed options other than number 3 is viable and appropriate given the divided operational functions within the digital euro ecosystem for inner scheme disputes. The ECB would need to participate in investigating the issues as well.

- How is a payment via the digital euro wallet/account considered: as a guaranteed/final payment or like a “normal” SEPA payment? For example, many banks offer to pay in a web shop via internet banking solutions, where all needed checks are done if customer is allowed to make the payment (account check, cover check, etc.) and the payment is final. This means no involved party (banks) are allowed to cancel or re-transfer the payment. “Dispute management” has to be done between the consumer and the merchant. So, setting up a dispute management (defining the roles of the intermediaries and/or Eurosystem) should only be needed between the scheme participants.

- Each stakeholder should be responsible for their own services rendered, based on “SLA”-like agreements (service-level agreement) in the scheme management.

- How to proceed in cases where the Eurosystem is causal for the failure of any transaction (safeguarding the right to indemnification of banks against the Eurosystem)?

- The model should also cater for incentivising good behaviour and punish bad. So issuing banks should be compensated when winning a dispute and acquirers for losing a dispute, for example.

Question 3. Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?

- Scheme rulebook would need to explain how the model works.

- Dispute management processes from SEPA\(^1\) could be taken as blueprint and adapted where necessary.

- Liability issues need to be duly considered. Principles of proportionality, swiftness, simplicity and cost-effectiveness should be taken into account when deciding on a dispute resolution mechanism.

- Expectation is that it would need to be 24/7 monitoring & maintenance. Who would pay these costs? Would intermediaries earn from issuing digital euros to cover these costs?

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\(^1\) [https://www.europeanpaymentscouncil.eu/search?kb%5B0%5D=tags%3A5891](https://www.europeanpaymentscouncil.eu/search?kb%5B0%5D=tags%3A5891)
ERPB written procedure on digital euro
5th technical session
EBF Response
EBF Response to ERPB Written Procedure Digital Euro on End-User Onboarding, Core and Optional Services and Dispute Management

End-user onboarding and digital euro access and holdings

1. **What are your considerations with regard to one or multiple digital euro holdings per citizen?**

We concur with the view that for simplicity reasons, the easiest way of ensuring the respect of holding limits will be to initially allow each citizen to have only one wallet. This would be beneficial from the perspective of financial stability, operations, compliance, data protection and would also avoid the cost and effort for intermediaries to implement expensive cross-checks and cash pooling mechanisms between PSPs.

As a consequence only one intermediary would provide digital euro services to a given citizen. Therefore, the Eurosystem digital euro infrastructure should develop a tool that allows intermediaries to unequivocally check whether a PSU has digital euro holdings with other intermediaries in the whole of the EU before offering digital euro services.

However, this choice does not come without some issues to consider. Even though this approach would undoubtedly contribute to mitigating the risk of deposit disintermediation, it is key to bear in mind the unexpected effects that this approach could create in terms of possible market concentration and a possible undermining of the objective of strategic independence, especially with reference to the increasing presence of BigTechs in the payments market as authorised payment institutions in Eurozone countries. Also, the provision of a single account per individual is likely to lead to significant competition in the early stages of digital euro adoption. It is expected that banks and PSPs that will be the first to offer a complete and innovative offer of optional and value-added use services will be able to grab significant market shares immediately. This is likely, on the one hand, to result in an acceleration of optional and value-added services experimentation by innovative banks and PSPs, and on the other hand, to limit the ability of the others to catch up with the ground lost at the beginning.

2. **What implications would you see of a zero holding limit for merchants?**

We support a zero digital euro holding limit for merchants. Of course, further detailed technical analysis should be carried out to verify the impacts and feasibility. The implementation will have considerable complexity in order to address merchant needs (reporting, reconciliation etc) and that comes at a cost that will need to be supported by the merchants.
In the first place, it is key to define the defunding mechanism, which can either happen at the end of the day, at the end of a short time period or be an immediate transfer of 100% of the payments received to the commercial euro account. The conversion of digital euros into commercial bank euros must be automated and made possible without any additional effort from the merchants.

It is understandable how this zero holding limit solution could mitigate the risk of deposit shifts and bank runs. However, if the final choice is to provide a “zero balance” solution and an unlimited number of digital euro wallets, cash pooling services will need to be built. Moreover, it needs to be considered whether in some cases, such as refunds and innovative use cases, merchants should be able to initiate digital euro transactions.

Furthermore, if digital euro transactions are placed one-by-one into the account of the merchant immediately after the digital euros are received, this may be inconvenient for merchants. Indeed, many merchants prefer their monetary transactions to be credited with some level of aggregation as it eases the control of their cashflow and the reconciliation of their treasury. Moreover, depending on implementation, automatic (de)funding would create an additional transaction for each digital euro transaction. This doubles the infrastructure load, and raises the question how the additional transaction costs are going to be covered.

3. **What are the implications for financial institutions to allow merchants to build up a position during a specific short timeframe? And what timeframe could be considered?**

As stated in the previous response, we think that further analysis should be carried out to verify impacts of this functionality, e.g. regarding the implications in terms of ensuring a limited amount of digital euros in the system, as well as on banks liquidity.

As not all merchants want to be credited transaction by transaction, allowing merchants to build up a position during a specific short timeframe could be a useful feature, as long as it is subject to limitations on the use of the funds by the merchants. This would allow merchants to agree on the level of aggregation and timing they prefer for converting digital euro holdings into commercial money. Merchants should be allowed to hold a given digital euro only within a working day.

Financial institutions will need to provide the company with online reporting of both commercial money account and digital euro account, balances and transactions. This would be more and more important if the company has unlimited number of digital euro accounts/wallets.

Another important aspect is related to the importance of having a sustainable business model for digital euro transactions. Digital euro transaction fees should reflect the costs of the infrastructure and the service and be set by market forces. If this would not be the case, intermediaries would be forced to offer this service below cost and the adoption of the digital euro in transactions could destabilise the financial situation of intermediaries and impinging on market dynamics.
4. **What would be the considerations from a merchant perspective to build up a position during a specific short timeframe? And what timeframe could be considered?**

As said above, many merchants prefer their monetary transactions to be credited with some level of aggregation as it eases the control of their cashflow and the reconciliation of their treasury. In order to adapt the level of aggregation to the needs of merchants, digital euro payments should be accompanied with meaningful information on the underlying transaction (e.g. in-store or e-commerce purchases, refunds).

Usually, merchants have several accounts, and the treasury activity is to manage those accounts, guaranteeing the liquidity for payments. Having additional accounts/wallets for digital euro means that the treasurer would build the daily financial position on a higher number of accounts.

5. **What are your considerations around the staggered approach for access to the digital euro holdings?**

Access to digital euro in EU Member States not belonging to the euro area would probably not be a priority for users at least until it takes traction and would probably add complexity to the provision of digital euro and the project in general. For that reason, we think it is fair taking a staggered approach which focuses first on granting access to the digital euro to PSUs having to pay or be paid in the Euro Area. It is however important to ensure that the digital euro design and set-up can be replicated to the non-euro area and globally with other central banks. A pilot project with e-Krona could offer a good learning platform.

Having said that, we deem it is important that microstates with a monetary agreement (i.e. Andorra, Monaco, San Marino and Vatican City) should be treated differently from states aligning with the EEA via agreements (i.e. Northern Ireland and Switzerland). The latter, having their own currency, have the possibility to decide their own monetary policy and the possible issuance of their own CBDC. The microstates, on the other hand, have adopted the euro as their own currency and should therefore have access to the digital euro to the same extent as the other eurozone countries would have or, at least, their citizens should have the option to open a position in digital euro via EA PSP. Moreover, microstates PSPs should have the option to distribute digital euro themselves to their own citizens from the first releases.

Concerning merchant access to digital euro wallets, we note that the definition of merchant is not clear, and this is critical in terms of pricing, rules and guarantees for all participants in the ecosystem. Different companies such as gambling companies, distracted moral content companies, or companies selling creative medical treatments would have different risks for merchants. It should be defined whether there are any limits to the type of merchant that can access digital euro.
6. What are your considerations regarding the need for portability and the proposed implementation?

Before commenting on the topic of portability as such, we would like to emphasize the interconnection between onboarding and portability. As far as the onboarding of users is concerned, while we agree with the Eurosystem's principle of maximum synergy with existing processes, we consider it even more important to ensure homogeneity of those processes at the euro area level. The key element is, therefore, the need for a full standardisation of onboarding rules at European level, e.g., in terms of data collected and onboarding procedures, which should be entirely independent of the country in which the identification is carried out. This would be key and in line with the prime objective of digital euro which is to represent the “common” single currency in the digital age. Moreover, since the digital euro is an asset offered by the Eurosystem (via intermediaries), there needs to be a clear indication of the access rights and criteria that would lead to a refusal to open the account.

Regarding portability more specifically, while portability is a necessary corollary of the proposed provision of a single digital euro holding per citizen, we would like to stress that portability is a very arduous objective to reach. It should be first assessed how complex and costly it would be to implement portability across the EU. Portability would add a high level of complexity for an initial release, it is preferable to ensure a minimum viable product and subsequently add additional services based on their cost and potential benefits.

More in detail, firstly it should be noted that a “constant end-users digital euro holding identifier” is an entirely new concept compared to the structure of accounts in SEPA and the related transaction routing mechanisms, which are all based on the concept of “unique identifier” (i.e. IBAN) enshrined in all EU payments legislation. The IBAN-based structure is not suitable for portability (certainly not on a cross-border basis), considering that today the identification of the country of the PSP managing the account as well as the location from/to which a payment is sent/received plays a role in the current payments landscape in SEPA and in the EU legislation (e.g., for AML/CFT or statistical purposes). The choice of a completely new invariable and location-independent account number structure for digital euro and its implications should be carefully considered against this background. Fundamental issues and questions should be addressed, such as:

- Who is issuing/storing and is accountable for the “constant end-user digital euro holding identifier”?
- What are the checks that a PSP should carry out over it?
- What transparency does the identifier give the ECB?
- Can it be invariable in all possible circumstances and at all times or in other terms, how can the uniqueness of a D€ position be ensured?
- How does this invariance match with the need to “switch” also the services connected with a digital euro position?
- Can such a system coexist with the SEPA-wide IBAN-based structure and logic without any risks?

If portability is developed, clear rules on portability should exist in order to ensure it is as smooth as possible and no unfair obstacles exist. They should cover, for instance, the date and time when this portability is to be effective. However, the switching of intermediary should not include obligations to port transaction history, in line with the switching of other types of payment accounts.
Lastly, we consider important to include the portability process within the compensation model for both the old and the new PSP involved.

In conclusion, we think that before implementing portability it is necessary to carefully evaluate its costs for intermediaries as well as if there is a clear need and what would be the benefits from the customer's point of view.

**Core, optional and value-added services for the digital euro**

1. Do you foresee any core service in addition to the ones identified or re-categorise any of them?

Regarding the topic of core services, we consider the following aspects most important to consider:

- The concept of “core” cannot be equalled to “for free”, but the whole issue of an economic sustainable model should be addressed and an appropriate compensation needs to be discussed, including for core services.
- The proposal should distinguish between services that would be core for citizens and those core for merchants. For example, the automated defunding service could be core in the case of merchants, in order to implement the zero holding limit, but not necessarily for citizens.
- In any case, the consideration of certain services offered to merchants as core services, shall not be understood as an obligation for all intermediaries offering digital euros to citizens to offer digital euro services to merchants. Currently, many PSPs that offer payment services to citizens do not provide merchants with acquiring or payment aggregation services.
- The reverse waterfall should not be a core service. It does not exist in other payment means which are fully functional. e.g. in cards with respect to limits. It should be a value-added service. Furthermore, it is important that the choice of the instrument via which the funding/defunding is carried out to/from the linked payment account is left to each PSPs (e.g. for example PSPs are not mandated to accept funding via cash/ATMs).
- It should be clarified what the ECB understands by “recurring payments”. We assume that the ECB is not referring to direct debits.
- Certain digital euro transactions could be granted higher privacy. However, it is crucial that intermediaries have access to payment transaction data in the same way that they currently do for other digital payment means to fulfil their legal compliance obligations and to build more effective tools to protect users from fraud. Payment data is key for the development of innovation in finance and the value added and optional services for digital euro. The end users should be allowed to share their payment data and decide whether they can be used for different purposes, such as the offering of personalized, value-added services. This would be consistent with the EU priority of promoting data-driven innovation, also in the financial sector.
Offline transactions should not be considered a core service.

2. Do you foresee any optional service in addition to the ones identified or re-categorise any of them?

Other additional services that could be provided as optional or value-added services would be:

- Funding and defunding to and from banknotes
- Bulk payments
- Payment initiated by the payee (Request to pay)
- Management of acceptance devices

For each of these additional services, it will be necessary to analyse whether the development and provision of these services needs to be supported by the Eurosystem (e.g. through the euro digital scheme rulebook or/and the back-end functionalities developed) or whether their development and provision can be left fully to the market. As we have said, it is essential that the market has sufficient flexibility to develop additional services to the core ones, to innovate and compete. At this point in the design process, we believe it makes sense to focus on core services and then think about additional (optional and value-added) services.

3. What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services, either via the scheme rulebook and/or back end functionalities?

In the case for core services, the Rulebook should define clearly the functionalities and the process flow, identify the input and output information, and establish security and business rules so that intermediaries can develop those functionalities. Those functionalities and their implementation should be compatible with that offered by other means of payments. For non-core services (either value-added or optional) it should be ensured that intermediaries have flexibility to implement and evolve the service in accordance with the market. It is also important that the market does not develop proprietary solutions that prevent full interoperability between PSPs. In this respect common rules in a digital euro Rulebook could enable the creation of a truly standardized and interoperable infrastructure.

In terms of governance, it will be important to have in place an established path for raising requests for improving or enhancing the ECB’s backend stack over time, to support tech development required by intermediaries for core and optional requirements. A well-resourced IT team at the Eurosystem side for managing these requests in the early stages of intermediary adoption is needed.
Dispute management

1. View on the need of dispute management processes for a pan-eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e-commerce?

Dispute management is key for promoting trust when using electronic payments in POS and e-commerce, at least. Therefore, rules should be established to ensure that users can solve their disputes in case an issue arise. In the case of the digital euro, dispute management will be fundamental.

As current legislation already covers dispute management processes, it must be clarified how these rules should be applied also to the digital euro, protecting consumers and in general all parties involved, including PSPs and avoiding delegating everything to them (as in option 2). The issue of privacy in the event of fraud/counterfeiting must then be handled. Also, there are already dispute management processes in place on EU-level, it should be assessed whether these could be modified in such a way that they could be used for the digital euro. Processing disputes is complex and developing a dispute resolution mechanism from scratch would be difficult and costly.

Lastly, dispute management requires a clear classification of the different liability regimes that will apply to digital euro transactions (e.g. liability will be different for payer-initiated and payee-initiated transactions) depending on the use cases and characteristics.

2. View on the role of the Eurosystem vs. the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

Option 3 appears to be the most appropriate as the credibility of the payment system cannot be achieved without uniformity in interpretation and application. Uniformity should be guaranteed by the Eurosystem through scheme rules and technical functionality on scheme level, providing integration possibilities to intermediaries and enabling the application of defined dispute management rules. The scheme rules should also define in detail dispute management processes between PSPs and the Eurosystem.

Therefore, on the one hand, the scheme should set the rules on dispute resolution, such as the situations where the intermediary is allowed to debit a merchant without asking for authorization to solve a dispute. On the other hand, these rules should not limit the ability of market players to develop the mechanisms best suited to deal with these incidents.

The Eurosystem should be accountable and define the process for the management of all the disputes relating to the roles it plays, e.g., verification of transactions and settlement. Intermediaries should be accountable only for the tasks fully entrusted to them (as it is the case today according to EU legislation).

More in general, it is not fully clear what the following sentence on p. 4 implies: "Regardless of the option chosen the Eurosystem will not take any financial liability vis à vis the end user". If it refers to a direct relationship with the end user, we understand that possible liabilities of the Eurosystem would be dealt with and paid
throughout intermediaries (and the associated costs considered). We assume that the sentence does not mean that the Eurosystem should not be responsible in any case.

3. **Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?**

As indicated in the answer to question 2, uniformity and consistency must be ensured to guarantee the credibility of the system.

Disputes will have to be handled in the same manner as in the established four-party schemes. The Rulebook must establish precise rules, including the assignment of the role of "arbitrator" in cases where responsibilities cannot be clearly attributed. There should be one dispute manager to avoid having all intermediaries play this role individually for their cases. It should be ensured that the dispute manager gets access to documents generated by the system and merchants to be able to ensure evidence.

It is important that the high complexity of these processes and the associated costs are factored into the digital euro business model so that intermediaries can recover the costs of implementing and running the processes (assuming for instance that digital euro can be expected to increase the demand on PSPs customer service).
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About EBF
The European Banking Federation is the voice of the European banking sector, bringing together national banking associations from across Europe. The federation is committed to a thriving European economy that is underpinned by a stable, secure, and inclusive financial ecosystem, and to a flourishing society where financing is available to
EDPIA feedback to the ECB following the 5th ERPB technical session on the digital euro held on 06/12/2022

A. END-USER ONBOARDING AND DIGITAL EURO ACCESS & HOLDING

1. What are your considerations with regard to one or multiple digital euro holding per citizen?

EDPIA supports the decision to allow a citizen to hold only one digital euro account. This proposal makes sense to avoid the complexity of needing to aggregate multiple personal holdings across multiple intermediaries.

However, this implies a common database and the use of personal identifiers. As stated on slide 9, “imposing holding limits require identification”. A common directory of active accounts will be required to verify and enforce the limit of one account per citizen by PSPs (probably at account creation).

This central directory raises privacy concerns. Appropriate safeguards should be implemented, for example data anonymisation and minimisation, alongside clear rules to prevent the misuse of data.

The scheme entity, if managed as a public-private partnership, could serve as the right structure to manage this central directory, ensure its integrity, privacy, due process and adequate access procedures.

We also note some additional considerations in order to prevent the single account limit being circumvented in exceptional cases such as people with multiple citizenships.

Firstly, the central directory should be managed at a European level rather than nationally.

Secondly, special cases may require manual individual verification by the PSP when the account is opened: this includes the need to access personal data from another PSP which again raises some privacy concerns. A scheme rulebook procedure should define how to manage this situation such that the single-account limit can be enforced while respecting data privacy as far as possible and ensuring that data is exchanged within a protective and proportionate framework.

Additionally, harmonisation of KYC rules across Europe would help to simplify the account management process.

2. What implications would you see of a zero holding limit for merchants?

The need to define zero holding limits for merchants to control the amount of digital euros in circulation is understandable. The most effective way to implement is by allowing intermediaries to collect digital euros on behalf of merchants and settle merchants directly in bank money (collecting PSP model). We also note that this assessment likely implies a STP processing which will generate extra cost for merchants.

To reduce risk and limit the immobilization of working capital as well as simplify accounting management, a one-day timeframe is recommended, in line with current practice in digital payment systems.

Consideration should be given to whether a flexible treatment would be beneficial for certain categories of merchant (such as micro-businesses and professionals) where a specific merchant account may not be necessary.

Opening multiple digital euro accounts at different intermediaries would carry some potential benefits (e.g. risk reduction) but with increased complexity.

It is important to consider merchant preferences. Merchants will often prefer to receive a single daily transfer, and will welcome to possibility to have many holdings (for instance linked to specific business criteria such as geographies, sub-entities, or shops). Value added services around this multiplicity can be offered for example including aggregated views on the position and intraday movements between holdings.
These considerations in turn require that we consider the treatment of acquirers under the framework. It will be important to distinguish between firms' own digital euro holdings and digital euro held on behalf of merchants.

3. **What are the implications for financial institutions to allow merchants to build up a position during a specific short timeframe? And what timeframe should be considered?**

There is a different implication based on the risk to be borne by intermediaries in crediting merchants: before or after having their reserve account at central bank credited.

To reduce risk and limit the immobilization of working capital as well as simplify accounting management, a one-day timeframe is recommended, in line with current practice in digital payment systems.

As explained in session #4 (Nov 10th) about the supervised intermediary distribution, we understand that not only financial institutions but at minimum all PSP as defined in PSD2 will be eligible to offer basic services in digital euro such as building up a position during a specific timeframe. Given that the settlement in digital euro will be 24/7/365, it can be assumed that acquirers will settle their positions all together at the same time (midnight?) on a daily basis, which may cause high traffic and potentially bottlenecks if the settlement infrastructure is not able to cope with this level of stress.

4. **What are the implications from a merchant perspective to build up a position during a specific short timeframe? And what timeframe should be considered?**

Because of the zero holding limit and impossibility to use digital euros to make payments, to build up a position comes with very limited benefits for the merchant.

On the other hand, the merchant would have an amount of immobilized working capital as it is today with cash.

When the digital Euro is well established, it is likely that some merchants might want to build a position during a very short timeframe and thus be willing to quickly transfer to the bank account (as above to avoid immobilized working capital). Intraday movement to the bank account should be allowed at any time upon merchants’ decision or mechanisms put in place to allow automatic defunding based on configurable thresholds. At the beginning the timeframe can be the day as is the case today with card payments, or half day. But in the longer period there should be flexibility to transfer the bank account on demand.

5. **What are your considerations around the staggered approach for access to the digital euro holdings?**

The staggered approach is a prudent solution for a balanced introduction of the digital euro in the territory of the European Union. Some topics however need clarification:

- Understanding what happens if a non-EA citizen residing in an EA country and holding a digital euro account at an EA intermediary moves to a non-EA country
- If the term “non-EA merchants” refers only to merchants established in a non-EA country offering services to EA residents or also merchants located in a non-EA country accepting digital euro payments in physical shops?
- About the EA PSP, what about the passporting process and the third passport process (agent outside EEA)?

6. **What are your considerations regarding the need for portability and the proposed implementation?**

Regarding migration arrangements, a few points are highlighted:

- “Digital euro holding identifier” is kept by the consumers in its device: no issue
- “Digital euro holding identifier” is kept by the intermediary: delicate process and must be designed and implemented to:
  - Guarantee the integrity of the identifier
  - Limit the risk of loss of funds and other relevant data
Regarding the transfer of transaction data, it is necessary to clarify:

- Whether the originating intermediary is still required to retain the data, or is required to delete them
- Which time span shall be considered for data transfer

It can be assumed that a central database will be needed to consolidate all unique account references. A parallel can be made with the portability of IBANs discussed in the past at European and national levels. For example in France a large survey was issued in 2014\(^1\) in which the different options were described (integral account number portability, provision of a specific identifier to intermediate the account number, automatic redirection of payment operations from an account to another). Similar considerations may apply to the portability of the future potential digital euro, although the retained approach seems to move in the direction of the intermediated technical identifier option, for the sake of efficiency.

B. CORE, OPTIONAL AND VALUE-ADDED SERVICES FOR THE DIGITAL EURO

1. Do you foresee any core service in addition to the ones identified or re-categorise any of them?

The identified core services offer shareable coverage. It is suggested to evaluate further services in particular in:

- Transaction management services (e.g. direct debit, transaction monitoring, transaction reversal). This may include a core escrow service to allow parties to block a specified amount until the defined party agrees to settle fully, partial, or to cancel the transaction (similar to card pre-authorisation).
- User management services.

It should be mandatory for ASPSPs to make available the proper APIs to allow to third party providers the access to digital euro accounts in line with PSD2.

2. Do you foresee any optional service in addition to the ones identified or re-categorise any of them?

It is suggested to consider:

- Cash withdrawals at the counter or at ATMs as well as funding of digital euro account by depositing cash;
- Re-categorise “pre-authorization” from optional to core service, as it is essential to properly manage specific use cases.

3. What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services, either via the scheme rulebook and/or back-end functionality?

The selection, development, and provision of core and optional services should start with the involvement of the market. Once the core and optional services are defined, they should be regulated in a scheme rulebook, enabled by Eurosystem infrastructure (including for example APIs), and implemented in accordance with common guidelines provided by the Eurosystem.

The Eurosystem can play an important role in financing the creation of a new payment infrastructure (while the private sector will be involved in operating it in practice), which would be managed by the scheme entity. Note that this core infrastructure may be completed by private complementary infrastructures depending on final architecture decisions.

The functionalities supported by this infrastructure will be driven by the scheme rulebook, which shall mandate core services (i.e. private intermediaries will have to effectively support them in order to comply and continue to be certified), and leave the support of optional services (and VAS) to the discretion of private actors.

The combination of the scheme entity, structured with representatives of both public and private sectors on equal footing, and its associated new payment infrastructure, which development and maintenance would be financed by the public sector, would effectively support the development, provision and evolution of the identified core and optional services.

Moreover, this approach would allow the private sector to focus on user and market needs and enhance competition: companies would not have to bear the infrastructure cost, allowing them to consequently concentrate on innovation and value creation.
C. DISPUTE MANAGEMENT

1. View on the need of dispute management processes for a pan-eurozone payment method like the digital euro considering the prioritised use-cases: P2P, POS and e-commerce?

The introduction of an effective dispute management process is essential to protect the consumer and build trust in the new payment system and thus support its adoption.

In particular, it should be noted that the dispute management system:

- Is a distinguishing feature of global card schemes
- Is a weakness of some SEPA payment scheme
- Has a need for strict rules and a supporting platform, but also implies direct interactions with end-users and room for flexibility for amicable resolutions

A scheme should bring a rulebook with guidelines on disputes: users must trust in the scheme especially in case of disputes. The categorization as proposed pre-dispute, dispute resolution, and arbitration is a standard approach which guarantees a quick process with clear guidelines. The more detailed the dispute process is, the more used the scheme will be. In the USA, the Fair Credit Billing Act provides a process for cardholders to dispute fraudulent or incorrect charges. Other legislations around the World also govern the disputes/chargebacks.

In today's card ecosystem, four categories of disputes are distinguished:

- Fraud (stolen card),
-授权 (transaction without authorization),
- processing errors (duplicate transactions, invalid data, etc) and
- consumer disputes (issue between merchant and consumer such as service not received, etc).

It could make sense to have a similar approach for digital euro to capitalize on existing back-offices and to reuse existing assets.

2. View on the role of the Eurosystem vs the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

Taking existing dispute management systems as a reference, Option 3 appears to be the most effective approach, where the scheme entity as the governing body of the payment system will need to:

- Define the rules and responsibilities for dispute management
- Make available the necessary back-end technical functionality for management (e.g., transaction reversal)
- Assume the role of arbitrator for resolving cases of disputes that could not be resolved by intermediaries.

Operating as arbitrator, the scheme entity should have sanctioning powers with the possibility of applying penalties as it is the case for global payment schemes.

Based on the design principles of the digital euro, intermediaries:

- Manage the interaction with users of the payment system
- Are responsible for online validation of transactions

They will therefore have to act as the front end for dispute management towards end users, both consumers and companies.

3. Key considerations when implementing dispute management processes for both eurosystem and intermediaries?

In designing and implementing an effective dispute management process, it is necessary for the scheme entity as the governing body of the digital euro to consider:
- Clear allocation of responsibilities among the actors involved including intermediaries, technology providers, users, with a specific focus on possible users’ liability
- Guidelines for intermediaries (to be kept updated) with best practices to be adopted to prevent disputes from arising
- Operational and technical rules and tools for dispute management. It should be considered that different use cases may give rise to different dispute situations and therefore different resolution methodologies
- Information/education action to users by intermediaries
- A fair chargeback fee to cover the related administrative cost.

Also, attention must be paid to the interaction between fraud prevention process and dispute management process since most of disputes comes from suspect of fraud.

For merchants, disputes/chargeback pose certain risks (payment not authorized, service not performed, duplicate payment, etc). Chargebacks cost business time, effort and money, including chargeback fees. The dispute management process must be build in concertation with the acquirers of digital euro transactions.

We know that the number of disputes is huge at the beginning of each new process. Therefore, it is essential to have an automatic platform that manage the disputes cases at the launch of the digital euro.
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23 January 2023

EPIF input to the ERPB 5th industry session on the digital euro

Dear Evelien,

EPIF would like to thank you again for the opportunity to provide written feedback to the ongoing discussions in the ERPB with regards to the different design options that are being considered for the digital euro. We again reiterate our support for the ECB’s efforts to continue to contribute to the smooth operation of payment systems, also in the digital age.

We understand that the current discussions are centred around the end-user on-boarding, access and holdings in digital euros; core, optional and value-added services for the digital euro; and the dispute management mechanisms. Before addressing further our members’ views with regards to these elements, we would like to highlight that the compensation model that will be applied for the digital euro will have important implications, especially concerning the core, optional and value-added services. The below comments are therefore conditional on the future discussions on the compensation model.

Our views of the aforementioned discussion points are further explored below.

- **On-boarding, access and holdings**

On-boarding, access and holding of digital euro services are one of the core roles currently envisaged for the supervised intermediaries under the digital euro scheme. It is therefore crucial to get the balance right amongst all players of the ecosystem. Different elements are considered by the ECB with regards to this topic. In terms of the prioritization in the access to the digital euro, EPIF members fully support the staggered approach proposed. The digital euro will first and foremost have an impact on the priority user categories (i.e., individuals, businesses and governments) in the Euro Area and thus prioritizing their access should be the first step. That being said, regulated non-banks have an important role to play in supporting the internationalisation of the Digital Euro in the long-term.

Our membership, however, has strong concerns about the approach proposed in the ERPB technical sessions concerning the one-account limit for Euro Area citizens. In the current regulatory context, with the access to the ECB settlement system limited to certain account-based payment service providers (PSPs), the likely scenario is that every digital euro user will be onboarded through the bank where they hold their main current account. This would then again imply that payment institutions (PI) and e-money institutions (EMI) would not be in a level playing field with its bank sector counterpart.

Against this background, and while supporting the importance given to easy portability of digital euro holdings amongst PSPs, EPIF members stress that this would not solve the unlevel playing field between the bank and non-bank sectors. The reason for this is two-fold. First, although an important feature to be retained, portability will likely not be a very
frequently used function as it is unlikely that digital euro will want to spend the time to shift their digital euro accounts often between providers. Moreover, experience from other jurisdictions (such as the UK, where a switching service for bank current accounts has not resulted in a significant increase in customer switching) and sectors (such as the mobile phone industry, where incentives are often necessary to encourage switching) indicate that ease of portability is necessary but not sufficient to promote switching and promote competition. Second, it is our understanding that portability should not be meant as a synonym for single wallets. In fact, portability functions would be an added-value feature should multiple wallets be permissible. We also note that portability would need to be designed in such a way as to mitigate fraud and AML risks.

We thus would recommend to instead focus on wallet identification rather than limitation. In this regard, we see great potential to leverage on the advancements that are taking place in the space of digital identification, including through the ongoing eIDAS review.

Nonetheless, we also recognize the need to control the amount of digital euros in circulation in order to tackle the potential impacts on monetary policy and financial stability. A possible alternative solution to counter the need for limits in the number of holding wallets could be an overnight de-funding mechanism that would automatically balance digital euro holdings in excess in the various wallets. The technical feasibility of such a solution would of course require further considerations.

Concerning the digital euro zero-holding limit for merchants, EPIF members see the potential for legal uncertainty to arise due to the lack of a legal definition in place. We are also concerned that the zero-funding holding limit will significantly limit the utility of a digital euro for business-to-business commerce. Moreover, we would also appreciate further clarifications towards this holding limit, notably on whether this is envisaged to be a permanent limit or an "end of the day" limit. This is especially important given that the timing of pay-outs from acquirers to merchants is often a key tool to mitigate credit and fraud risk.

- **Core, optional and value-added services for the digital euro**

  EPIF members strongly believe that the benefit and attractive factor for end-users of the digital euro will rely on the added-value services that can be built on top of the core and optional functions. These added-value services will be directly related to the level of innovation that authorized intermediaries will be able to develop. We again reiterate the role of non-bank PSPs in driving innovation forward in the payments space. PI and EMI have been at the forefront of innovation for payment services and have a great potential to continue doing so in the digital euro.

  Against this backdrop, two important elements need to be taken into account. First, it is crucial that open banking provisions under the payment services directive (PSD2) remain mandatory for authorized intermediaries in the digital euro. This implies that services such as Account Information Services and Payment Initiation Services must be considered as core services. Retaining an equivalence between authorized intermediaries and payment account providers is imperative to ensure a level playing field and technology neutrality. Additionally, we also have some difficulties understanding how account information and payment initiative services could, in practice, be optional services to be offered.

  The second element to consider relates to the compensation model. It is our understanding that the compensation model is a topic to be addressed in the forthcoming meetings. Nevertheless, the discussion on the core, optional and added-value services cannot be separated from the envisaged compensation for the offer of these services. EPIF would therefore welcome further clarification on how the different services (i.e., core, optional and added-value) would be compensated.

- **Dispute Management**

  The dispute mechanism will be an important part of the digital euro, as it is in existing payment schemes and our members appreciate the ECB’s considerations to ensure that rules and procedures are in place to settle potential disputes. With regards to the presented options for the introduction of a dispute management framework, EPIF recognizes Option 3 as the only viable option. Option 3 mandates the definition of the scheme rules and technical functionalities in the Rulebook, at a scheme level. This is what we observe nowadays in existing payment schemes and technical specifications are at the core of dispute management.
We therefore believe that the discussion should not be focused around the option – as we only see Option 3 has the possible way forward – but about the agreed scheme manager. On this, EPIF is convinced that the Eurosystem does not need to be operationally involved as the scheme manager. As per our input to the 4th ERPB Industry session, EPIF members support the involvement of the European Payments Council (EPC) in the digital euro scheme management and rulebook development. The EPC has over the years been at the centre of payment schemes in the EU and has successfully balanced the needed scheme rules and technical specifications.

With regards to the scheme rulebook development, there is an additional consideration that EPIF would like to raise. As we have been addressing during the digital euro investigation phase, a level playing field between the bank and non-bank payment sectors will need to be maintained. This is not only relevant when assessing the possible features for the digital euro but will also be an important consideration in the development of the digital euro scheme rulebook. Therefore, EPIF members would like to underline the importance of ensuring two Co-Chairs for the development of the Rulebook, representing the bank and the non-bank payment sector respectively. A similar arrangement has been successfully conducted by the EPC in the recently published SEPA Payment Account Access Scheme (SPAA) and we believe that parity representation would play an equally important role for the digital euro scheme. We therefore urge the ECB to consider such a possibility.

EPIF looks forward to further engaging with the ECB on these important questions.

Please allow us to reiterate once more that EPIF will be in a better position to make concrete recommendations once the design and unique contribution to the existing European payment landscape is better known.

Best regards,

Yours sincerely,

Nickolas Reinhardt, Head of the EPIF Secretariat
5th ERPB technical session on a digital euro

ESBG input

ESBG welcomes the opportunity to provide feedback to the ECB on the various topics discussed at the 5th ERPB technical session.

End user onboarding and digital euro access & holdings

1. What are your considerations with regard to one or multiple digital euro holdings per citizen?

We believe each citizen should be able to have only one digital euro holding - as long as only ASPSPs are allowed to open and maintain the first digital euro wallet. Indeed, only ASPSPs are able to fully comply with the legal requirements and not only provide front end and back end solutions, but also a broad range of additional services for their clients. This approach would ensure limits to individual holdings are respected and this in turn would imply the control of the amount of digital euro in circulation and therefore decrease the risks to financial stability.

However, some members fear that one wallet could lead to the risk of disintermediating banks, especially if non-European BigTechs manage to offer this service first. As such, we believe that the ECB should also explore the option that citizens could have multiple holdings and only allow this possibility if it is guaranteed that checking (and limiting) the cumulative amount held by each citizen at any given moment (or after each transaction) is technically feasible.

We consider this as a clear example of a design choice that will have a direct impact on policy implications, both related to financial stability and monetary policy. We recommend the ECB to investigate the potential impacts thoroughly before taking any decision on the design related to the number of wallets per citizen and individual holding limits.
2. What implications would you see of a zero holding limit for merchants?

We support the position of zero holding limit for merchants. The real-time settlement would not be affected by the zero-half-limit, since merchants who are legal persons would not be allowed to use the received digital euros for their own payments and this the rationale to hold them for more than to the end of the day cannot be justified. Payment Service Providers can agree with each client and merchant when every single transaction can be converted into commercial bank money (e.g., every single transaction, intraday, every 5h, etc.).

The approach of a zero-half-limit negates the digital euro real-time settlement, as every single money transfer would require a conversion to book-money form in favor of the merchant account. The technical process overhead of an immediate resolution until finalization at the merchant account would put an additional burden on the collectors’ infrastructure (non-bank PSP). It could also be disputed that merchants would welcome that many transactions: in some countries, merchants are credited once a day as they are charged for every individual transaction on their statement.

3. What are the implications for financial institutions to allow merchants to build up a position during a specific short timeframe? And what timeframe could be considered?

We consider that digital euro holdings would presumably have the same implications as cash holdings in terms of a merchant cash balance. The advantage of the temporary digital euro cash holding (which represents a real-time settlement that, unlike cash, can be checked for balance at any time) for the merchant bank would be the possibility to flexibly design both time- and volume-dependent agreements for automated transfer to the book-money merchant account. In this respect, efficient clearing processes would be possible in contrast to instantaneous liquidation and, in addition, no physical transport is necessary compared to cash. A temporary digital euro holding could contribute to less effort around cash for all parties involved.

When instant payment will be mandatory for all PSPs, defunding can take place 24/7/365. If the merchants would be entitled to hold their daily takings for multiple days, this would, in addition to consumer holdings, drain even more deposits from the commercial banks making them even more dependent on issuing covered bonds to finance their lending business thus making loans more expensive to borrowers / EU citizens.
4. **What would be the considerations from a merchant perspective to build up a position during a specific short timeframe? And what timeframe could be considered?**

The build up should be allowed only for merchants/self-trades who do not have a company/legal person for their business. In this case the individual cap for physical persons would be the maximum holding limit and any excess in the „wallet“ would be deposited into the connected bank account. The self-traders could use their digital euros to pay with according to the same principles as any physical person. Assuming functional proximity to cash, a digital euro stock can be attractively used like stationary cash recycling to reduce the daily stock and thus broaden the base for digital euro issuance to consumers. Authorised digital euro issuance would be through consumers’ account cards, as with cash (as long as digital euro transfer is at least as fast as cash issuance and for - temporary - offline consumers).

A similar use case would be the issuance of received digital euro against cash receipt, possibly as change.

These two preceding cases reduce digital euro holdings at merchants and optimize digital euro distribution processes.

It is also conceivable that for small traders (e.g., hairdressers, small-scale retailers, etc.) an attractive digital cash register without EA-PSP with direct connection to thier ASPSP business account would be possible. As a digital euro daily cash register without intraday offer, it is unloaded daily at the ASPSP. This case does not require a collector (non-bank PSP) due to the digital euro money functionality. Collectors originate from traditional card payment to efficiently handle the money gaps between the time of traditional card payment and card settlement payment, or are only recommended in the case of intraday digital holdings. The result would be a possibly cost-effective digital payment acceptance solution.

5. **What are your considerations around the staggered approach for access to the digital euro holdings?**

We agree with the idea of prioritising the euro area. However, we believe a digital euro should not be made available for end-users residing outside the EEA and it should not be used for payments between payers and payees outside the EEA area since the EU and Eurosystem should not interfere in the monetary policy of third countries. In non-euro member states, it should be made available to customers in in connection with a euro denominated deposit account for the funding/de-funding by a distributor PSP. In the euro area, a digital euro should be made available by willing PSP intermediaries to all willing legal residents in the euro area member states that also hold a bank account based on the PAD legislation in the said member state.
The technical access spectrum to be taken over by intermediaries for the Eurosystem has not yet been prioritized. It would still have to be clarified in which order which access models with which KYC procedures (eID by any payment service intermediary or ASPSP-based) should be introduced. It is also still open whether to start with wallets for holdings through intermediaries or through a digital euro gateway in the hands of the parties involved, or whether to introduce all types of access at all or even simultaneously.

6. What are your considerations regarding the need for portability and the proposed implementation?

The proposal provides for a unique identifier for a citizen’s digital euro holding in the Eurosystem (provided only one holding per citizen is allowed). This is intended to resolve the trade-off between stock limit checking via digital euro binding of customers with different intermediaries and data protection.

By means of a unique holding ID in the Eurosystem for a stock commitment, a single digital euro stock of a citizen can be held with intermediaries in such a way that the overall limit provided for citizens in the Eurosystem can be affected as a control variable vis-à-vis all intermediaries, even if several intermediaries are used for one stock, as protected private information.

For the implementation of the outlined holding ID, a derivation from the European standard for the respective national identification of taxpayers, the TIN, could be explored. A TIN is common in all EA countries in connection with KYC at financial institutions. It would also be applicable for minors indirectly via the KYC of the parents. Due to the TIN standard, a direct validation of the formal correctness of the holding ID by any intermediary is feasible and can be used as a universal element for the inventory assurance request. The only uncertainty would be that a citizen could have a TIN in multiple countries. Since this quantity would probably have no relevant impact on the stability of the euro system, the absolute restriction “one stock” should be changed to “one stock per tax identification region”. The approach with an exclusive stock check only by the Eurosystem can be an essential factor to strengthen the trust of citizens in the digital euro, as it realizes the private autonomy to know the stock level like a cash exchange. This should be consistent in time and should also be used for the identification of the citizen.

The portability rules from the PAD should apply and the wallet should be managed by the PSP that also manages the connected deposit account for funding/de-funding purposes from time to time. However, it should be considered that portability may pose additional risks and require further thinking, for instance, if the wallet is moved to an intermediary which does not have a banking license, the funding and defunding process will be more
complex. Allowing the PSP to access the bank account is possible (open banking), however will require further activities to be performed by customer and at the same time further control activities (e.g., against fraud) on the banks. Additionally, the validation of the holdings and limits between a bank and a non-bank intermediary is complex.

Core, optional and value added services for the digital euro

7. Do you foresee any core service in addition to the ones identified or re-categorise any of them?

The core service of a digital euro is only one: to be the digital image of cash, meaning that any additional values should be built by the supervised intermediaries/ASPSPs and offered in competition with each other. Many of the examples provided imply that the digital euro would be developed by the ECB/Eurosystem into a payment scheme fit for multiple use cases. Such developments should be left to the competitive market. In the same manner regarding banknotes and coins the central bank is not in charge of CIT services to/from banks/corporates/merchants, ATMs, cash till devices. but has left that to the market to resolve.

Regarding the list of core services, manual funding and defunding can be considered as a core service. However, if automated funding and defunding means a programmable feature, this should be considered as a value-added service. Only if a citizen has explicitly agreed to an optional account information service should it also be possible to display the balance via the authorized service.

Among the optional services, request-to-pay should be preferred over recurring payments. The digital euro, due to its architecture designed for the digital world, is ideally suited for addressing payment requests, which can be fulfilled directly as soon as the event occurs. A standing order, on the other hand, requires administrative effort on the part of the citizen in terms of the relationship with the payee and is therefore less relevant for a flexible digital world. An RTP module would also likely simplify the implementation of pay-per-use and a future M2M payment. Finally, pay-per-use enabled via pre-authorisation services should be considered as value-added-services.

8. Do you foresee any optional service in addition to the ones identified or re-categorise any of them?

The value-added services that the banking sector could build through the digital euro is limited to the field of programmable payments, as all other use
cases will mimic payment options already in use (cards, instant payments, and credit transfers).

The range and complexity of the optional/VASs will also depend on the concrete design of a digital euro (account based vs token based). In case the Eurosystem decided for a token based solution, more opportunities would arise:

- The existing account based solution are already well evolved and integrated in the landscape. Development of further programable products/services based on a digital form of money is possible, but would not necessarily require central bank money.
- A token based option would allow the usage of smart contract, therefore offering more integration with complex business processes. However, it should be noted that existing use cases have a niche coverage, although the growing diffusion of distributed ledger technologies platforms among investors is one of the factors driving the rise of a market for digital assets, and not yet the wish to improve mass customers’ satisfaction.

We believe a digital euro scheme shall allow and enable supervised intermediaries to build value added services in their own user interface, on top of those that can be provided already by exiting payments methods and infrastructures (e.g., analysing transactional data or AccIS like financial passport)

Some concrete use cases where a digital format of money could be applied:

1. E-commerce delivery against payment or payment after delivery, including the splitting of money through entire supply chain.
2. Payment of taxes: right after the receipt of funds, the legal % will be automatically paid to tax authority. This can bring a better tax collection, less accounting bureaucracy.

**9. What would be the concrete ways for the Eurosystem to support the development and provision of each identified core and optional services, either via the scheme rulebook and/or back-end functionalities?**

The best way to support this would be through a rulebook.
Dispute management

10. What is your view on the need of dispute management processes for a pan eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e commerce?

The payment dispute rules between payer and payee should be part of a PSP managed scheme. In the banknotes/coins use cases the central bank does not have any dispute rules but instead the general legal protections in the contract area prevails and any disputes will be managed by the parties without the central bank participation. The same principle should apply to the digital euro. Any additional rights of payers / payees should be part of a payment scheme rule set operated by the PSPs that support the interoperability VAS for inter-bank payments.

The ECB should assume the role of resolving disputes regarding claims of counterfeit of the digital Euro, claims of IPR infringement, possibly theft/copy of the associated wallets and other issues related to the basic security protections in the digital euro provided by the ECB. Typically, the ECB should manage such claims raised via the ASPSPs that act as supervised distributors.

We consider options 2 and 3 as the most expensive.

11. What are your views on the role of the Eurosystem vs the role of intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

Any payment system disputes should be resolved according to the rules in the schemes.

The ECB/Eurosystem should not deal with disputes between payer and payee but leave these to the intermediaries if such disputes are regulated in scheme rules. A normal contractual disagreement between payer and payee is dealt with in court and this principle should also apply to digital euro transactions. The ECB/Eurosystem should only manage issues arising from claims of counterfeit or other basic security flaws in the digital euro and also defend it against ant IPR claims.

12. Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?

Separate claims on basic shortcomings by design in the digital euro from the disputes that end users of any payment system may have between payer and payee and keep out of any contract law related disputes between buyer and seller.
ETPPA response to
ERPB technical session #5 on a Digital Euro (questions from 6-Dec-2022)

Firstly, we would like to express once more our appreciation for the opportunity to participate in the ECB’s design phase for the Digital Euro (D€) via the ERPB technical sessions and the possibility to provide written feedback. It is of essential importance for us to explain our preferences and to highlight any material issues for our sector of the industry.

More and more, it looks like some of the main design choices have been made towards favouring an account-based approach with a fixed holding limit. We believe that both of these elements are counterproductive to the take-up and success of the D€, which should be the main driver. In addition, they would also undermine the main monetary policy objective of maintaining a central bank euro as the “monetary anchor” of our economy, as it is today. The essential features for that are a) to clearly differentiate it from private money, currently assured by the different form factor (coins and notes), and b) by allowing everybody to change (regulated) private money into central bank money (cash) if so desired. To sustain the public’s trust in the central bank euro when adding a digital version of it, these two essential features should not get changed or limited by making the D€ look like a commercial bank money account and putting any fixed holding limit on it. A token-based approach and tiered remuneration would be much more promising for achieving take-up and monetary anchorage.

In reply to the 3 new design areas and the related questions asked at the 5th technical session, we would like to comment as follows:

1) End user on boarding and digital euro access & holdings

We fully agree with the proposed roll-out prioritisation, namely bringing the D€ first to the euro area and then expand that later via a staggered approach to the EEA and other relevant jurisdictions.

Limiting the number of D€ holdings (accounts or wallets) to a single one per citizen would be one of the unfavourable consequences of wanting to introduce fixed limit holdings (without requiring undue identity matching across different intermediaries), which may launch the D€ on the wrong foot already. The public is very unlikely to appreciate a D€ with a limited amount and even less when getting bound to just one regulated intermediary. Furthermore, such a single wallet would
probably motivate the biggest players to attempt an initial land grab, which is probably not the intention. Disincentivising large holdings by tiered remuneration would be the better solution.

The proposed “easy portability” from one intermediary to another would be helpful, but is only secondary. We do not believe that this would be perceived as a solution to a single-holding restriction.

We appreciate your suggestion that AISP & PISP services would reduce the impact of this restriction by allowing value-added services (VAS) independent of the holding intermediary, and this is indeed the case, but if people don’t like the D€, they will not want to use VAS on top of it either.

Allowing multiple holdings for merchants is of course better, actually a necessity, but here again the suggestion to impose zero holdings overnight is introducing major undesired operational implications, e.g. reconciliation overhead, which will make a merchant’s use of D€ quite painful and hence counterproductive to any fast take-up.

Intraday positions and overnight zero holdings, as currently applied to (wholesale) central bank money accounts, can be managed by credit institutions (and hopefully other PSPs soon), but we would see major challenges in trying to expand this concept to merchants and the corporate world, even if the timeframe was extended to multiple days and supported by the waterfall automatism.

2) Core, optional and value added services for the digital euro

The suggested list of services and their categorisation into the 3 areas core, optional and VAS seem to be appropriate from our perspective, potentially except for “recurring payments” and “pay-per-use services”, which might be better seen as VAS, as explained below.

We understand that AIS & PIS are classified as optional only vis-à-vis end-users and would suggest making this more obvious by amending footnote 1 on slide #8 from “May need to be facilitated ...” into “Must be facilitated ...”.

We appreciate the suggestion to leave the development and provision of VAS by supervised intermediaries fully to the market, so that only core and optional services would be regulated by the forthcoming D€ scheme rulebook.

This is particularly important, because many VAS will be independent of the underlying type of money used (D€, commercial bank euros, e-money euros), so this will go hand in hand with
leaving the programming of payments to the market as well, as suggested in the previous technical session.

Please allow us to repeat our previous feedback on that matter, namely that this highlights the need for any D€ scheme to stay at the technical level like SCT or SCT Inst, and not venture into the commercial space above. Programming payments is a value-added service above the technical level, and it would be beneficial for everybody if this can be done independent of any individual payment instrument at the technical level below. Standing orders, for example, should be implemented once and available in the same way for instant, non-instant and any other, incl. D€, money transfers. Hence, yes, there should not be any “dedicated programmability platform layer” for D€ payments.

With that in mind, we believe (at first sight) that “recurring payments” and “pay-per-use services” may better fit into the VAS category, together with the examples listed in the Annex to this subject.

The list of services itself is likely to expand over time, as you say, and re-categorisations might be required as well once operational experience is being gained, but we would not have any other suggestions for the time being.

3) Dispute management

We agree with your outline of the relevance of dispute management for payment schemes, and believe that the D€ scheme could not be properly implemented without.

With regard to the role of the Eurosystem vs. the role of the intermediaries we agree with your assessment of dispute management options and that options 2 and 3 would appear to be the most appropriate for the two cases where the Eurosystem is operationally involved or not.

In conclusion, our biggest concerns in relation to session #5 are the proposed D€ restrictions under point 1) due to the account-based form and fixed holding limits, which we believe will hinder take-up, and under point 2) the definition and categorisation of what we would call VAS and how that relates to the programming of payments.

Therefore, we would like to reiterate that the ECB’s monetary policy objectives should not be the only, and maybe not even the most decisive factors in designing the D€. Acceptance by payers and payees and the whole financial services ecosystem should prevail and define at least the
initial basic principles, which can then be fine-tuned to ensure that the most important monetary policies are respected.

For all the reasons listed above and all those described in our previous feedback, a Digital Euro should be designed along the following lines:

1) Focus on digital cash, i.e. tokens in a wallet - anything else would be hard to explain and could create a myriad of competition issues

2) Anonymous up to legal limits, strong privacy thereafter and no fixed holding limits, which would result in usage restrictions and undermine the monetary anchor status

3) Enforce low/no cost to the customer, there must not be any per-transaction fee

4) Maximise usability, including offline use, and avoid any unnecessary friction

5) Maximise accessibility and payment handling via APIs to enable value-added services by TPPs

6) Bundled with EU Digital Wallets if and when available

+++ END +++
ERPB technical session on digital euro
End user on boarding and digital euro access & holdings
What are your considerations with regard to one or multiple digital euro holdings per citizen?

We are supportive of digital euro as, if designed in the right way it, has the potential to offer a compelling value proposition to customers and merchants, overcoming some of the current limitations in the payments landscape. To achieve this, digital euro must be widely adopted by customers across the EU.

To foster adoption, we encourage the Eurosystem to reconsider its initial stance to allow users to freely decide upon the type and number of holdings they own, in the same way they currently decide what and how many bank accounts they hold. Introducing a limitation would be a significant impairment to adoption.

Freedom for account holding would stimulate competition which brings innovation, a fundamental objective that the Eurosystem aims to promote with the introduction of digital euro. Competition also ensures that the cost of digital euro account remains low, paramount for customer adoption and inclusion. Allowing consumers to have multiple holdings will address innovation and competition in a more efficient way than by solely relying on portability features.

Wide customer adoption will also encourage merchant endorsement of the digital euro, as the more customers adopt digital euro, the more merchants will be incentivized to meet this demand and follow.

In the same way that the current payment system has managed to balance freedom of choice with financial stability, we would welcome the Eurosystem to explore mechanisms that ensure financial stability without limiting consumer digital euro holding. We would also welcome the Eurosystem to consider that holdings with self-custody wallets be an option.

What implications would you see of a zero holding limit for merchants?

If digital euro can be considered as complement to physical cash and similar in its nature, then we would encourage the Eurosystem to refrain from setting strict zero holding limits for merchants. There currently is no obligation for merchants to deposit all notes at the end of the business day, yet, merchants will typically avoid storing larger amounts of physical cash within their premises for a longer period but instead convert them to commercial bank money. Similarly, we would welcome a more flexible approach that will allow merchants to hold digital euros over night. To limit bank’s exposures the Eurosystem may instead introduce specific caps on holdings that cannot be surpassed.
This would allow merchants to secure that refund payments to their customers will still be possible using digital euro transfers, even at the very beginning of the next business day. During the business day, it can be assumed that eventual intra-day holdings can be used to perform refund payments.

We understand that reverse waterfall mechanism may likely also be used to make refund payments. In case the Eurosystem will not be able to cater for the above request to put in place more flexible holding limits for merchants, it needs to be ensured that reverse waterfall scenarios will not be subject to any additional costs to merchants.

Furthermore, any zero holding limit must be standardised with common rules applicable to all licensed intermediaries to enable end-of-period automated posting and to support a straight-through processing (STP) reconciliation in retailer’s back-office at agreed period and time, within the agreed time zone of the retailer’s operation.

What would be the considerations from a merchant perspective to build up a position during a specific short timeframe? And what timeframe could be considered?

If reverse waterfall funding mechanism will only be offered to merchants on a costly basis, then built up positions of digital euro should be used as an alternative to initiate digital euro refund transactions. The timeframe then becomes somewhat irrelevant – the more important aspect to consider is that a minimum level of holdings will continue to be available to the merchant to secure refund payments, also at the end of business.
We consider two different methodologies for intraday defunding. The above graph depicts defunding of merchant position based on periodicity. Every dot on the graph represents a transaction made with digital euro, thus a change in the merchant’s digital euro holding. At predefined and regular time intervals defunding occurs which is shown in red. A minimum holding of 2 will be kept during the day for the merchant to be able to perform refund transactions at any given time, also right after defunding. In case zero holdings will indeed be required, funding will take place at the start of the business day funding takes place (green) to secure sufficient holdings for eventual refund payments. In the same scenario of strict zero holding limits for merchants, all digital euro holdings are defunded at the end of the business day.

As opposed to periodic defunding, an alternative method could be based on thresholds. If digital euro holdings of a merchant exceed the predefined holding limit, automatic defunding occurs – irrespective of the time intervals, again depicted in red.

Periodicity may be more appropriate to trigger defunding for merchants with high and constant volumes of transactions. Thresholds can be used for smaller merchants with irregular traffic and lower average ticket values. Merchants and their PSPs should therefore agree on what can be the most suitable setup depending on the transaction profile of the merchant, since there may be many specific cases, even be different at different moments in time.

In conclusion, we propose that the Eurosystem adopts a more flexible approach towards holdings. Retailers need to be control through agreements with their PSP to determine when and what to sweep to maintain the right balance to operate their daily business. Holding positions, sweeping limits and periodicity should be flexible enough to facilitate retailer adoption and holding management.
What are your considerations around the staggered approach for access to the digital euro holdings?

No comments.

What are your considerations regarding the need for portability and the proposed implementation?

Portability will be essential for both, citizens and merchants. We welcome the indication that the Eurosystem and the future digital euro scheme will support the setup of portability to allow a seamless and harmonised journey from a customer and merchant point of view. Standardised portability processes should be based on common rules, documentation, and request messages.

Portability and end user control over data is at the core of the open data economy that is being built in the EU. To achieve these goals, an important infrastructure is created around government issued identities, digital wallets and commons standards for electronic signatures and trust services, focused around the revised eIDAS regulation. It is vital that the Digital Euro scheme and the component parts it relies on are compatible with, not an alternative to, the above-mentioned infrastructure. This should be the case even in a scenario in which the digital euro will be realized before all parts of such infrastructure are built, or even specified. In the latter case, mechanisms for future implementation must be considered. We therefore suggest that the future Digital Euro Scheme:

- Use eIDAS as framework for digital signatures, authentication and trust services.
- Mandate acceptance of government issued eIDs
- Enable the EU digital wallet to be the carrier of Digital Euros for citizens

In addition, while portability is an important right, mitigation mechanisms should be in place to protect citizens from submitting to process their transactional data or locking in their digital euro holdings via unbalanced contracts. In essence, freely revocable consent should be the primary mechanism for a consumer to accept the services of a bank in relation to digital euro.

To ensure third-party service providers the ability to offer services in relation to the digital euro, it is important that it be covered by PSD2 (or future PSD), so regulated entities can act as PISPs or AISP using the same infrastructure as the banks. Ensuring compatibility, standardization and cross-acceptance by relying on eIDAS is an important building block in achieving this.

How can it be assured that one citizen can only have one single end-user digital euro holding identifier? Will the Eurosystem consider the setup of a identifier repository and lookup service?
ERPB technical session on digital euro
Core, optional and value added services for the digital euro
Do you foresee any core service in addition to the ones identified or re categorise any of them?

To secure financial inclusion and privacy of payments, it needs to be assured that the funding of an offline device should also be considered as a core service.

While transaction initiation is an obvious core service, refund services also need to be addressed. They should not be considered as a classic one-off transaction, as refund transactions should ideally be linked to an underlying initial sales transaction. In addition, specific characteristics need to be considered when discussing refund payments, e.g. reconciliation, authentication, etc. Furthermore, there should also be the possibility to initiate refunds as batch payments.

Not mentioned at all in the list of core and optional services is a Request to pay messaging service that should be made available as core service to facilitate many of the specific customer experiences across the use cases, whether E-Com, POS or P2P.

Payment confirmation/rejection notifications are already part of core services. It needs to be guaranteed that such notifications will not only be sent to payer’s mobile devices but will also appear on payee side to release goods and services in a timely manner.

Within the user management domain, we also see a clear need for the payment service user to be able to customise privacy settings.

Payment initiation services are categorised as optional services. How can this be understood? End users should always be entitled to make use of PISP’s services for the initiation of payments.

Do you foresee any optional service in addition to the ones identified or re categorise any of them?

Additional optional services need to include future dated payments. Although recurring payments are also future dated payments, they will typically always have the same amount. Future dated payments should allow the payer more flexibility in setting up the payment; they may be considered as programmable payments.

Account on File (AoF) may be considered as technology supporting future dated payments in which the consumer pre-authorizes a merchant to bill a payment instrument for a purchase. This can support customer-present transactions (e.g., a “one-click checkout”) and customer-not-present transactions (e.g., a consumer orders a product on day 1, but the merchant bills on day 2 when the product is shipped). These two types of transactions are very common in e-commerce: pre-orders, utilities and
subscriptions may rely on AoF transactions. To support widespread merchant acceptance, and therefore broad user adoption, we believe supporting both use cases is critical.

Pay-per-use enabled via pre-authorisation service are mentioned as optional services. Pre-authorisation services are indeed valuable services to consider, especially for payments with unknown final amounts, whether for petrol retail, travel industry or even for specific grocery retail use cases. It’s important that the various different use cases are considered; they are not M2M payments. For these cases, in which the final amount of the purchase is unknown, it is essential to allow the merchant not to charge the payment, or any type of pre-authorization, until the amount is known.

What would be the concrete ways for the Eurosystem to support the development and provision of each of the identified core and optional services either via the scheme rulebook and/or back-end functionalities?

The scheme governing the future digital euro should publish APIs and SDKs allowing simple and consistent integrations of payment services. Services, as well as interfaces should undergo regular revision, ideally paired with a public consultation procedure allowing the wider payment ecosystem to provide feedback – any changes should be reflected in the scheme rulebook and may impact the back-end functionalities. A clear focus must be given on how best to achieve interoperability of services across intermediaries.

The scheme rulebook should also define how programmability can best support payment initiation, recurring payments and AoF and other payment services. Furthermore, the scheme rulebook should explore how smart contracts could promote innovation on top of the core payment services.

Homologation approval will have to be addressed by scheme rules to secure compliant implementation of solutions across the different members of the digital euro scheme. Achieving true interoperability of services across intermediaries will be the cornerstone of this activity.

In addition, the scheme should provide a sandbox environment to support development of upcoming payment services.
ERPB technical session on digital euro

Dispute management

View on the need of dispute management processes for a pan eurozone payment method like the digital euro considering the prioritised use cases: P2P, POS and e-commerce?

Dispute management processes can be seen as a valuable addition to the digital euro setup. Consumers may be exposed to a significant fraud risk especially when transacting online in an e-commerce environment. A well-defined and functioning chargeback process can protect consumers from such fraudulent transactions. It may also help them put pressure on merchants in case they are not fulfilling their legal obligation.

There may not be the same necessity for the implementation of dispute processes for POS digital euro payments. At the physical POS the level of fraud is almost negligible, and merchants’ legal obligations are typically fulfilled as the payment occurs.

Although we don’t estimate that the dispute management processes will be the critical success factor of a future digital euro scheme, it is certainly a necessity, and we strongly encourage the Eurosystem to consider its implementation as early as the first release for e-commerce payments.

View on the role of the Eurosystem vs. the role of the intermediaries in regard to dispute management processes for the digital euro, particularly considering the proposed dispute management option 2 and 3?

Dispute management should go beyond the legally set baseline for online dispute resolution. An elaborate and well-defined dispute management framework should provide consumers with sufficient confidence of utilising digital euro payments. It should further come with a single and harmonised customer experience, regardless of the intermediary that is involved in the processing of the concerned transaction.

Direct interactions between the Eurosystem and users of digital euro have already been ruled out – licensed intermediaries will be responsible for the distribution of digital euro and therefore also for the direct relationship of digital euro users. It is hence a consistent approach to involve intermediaries in the handling of disputes; the Eurosystem should not be the entity directly interacting with digital euro users for dispute management when they have delegated all remaining consumer facing services to licenced intermediaries.

Rules and procedures laid down by the digital euro scheme are a necessity for the functioning of dispute resolution mechanism. In addition, it needs to be guaranteed that all participating scheme members will be able to communicate with one another for the sake of exchanging relevant information regarding the
disputes. In a setup where the number of scheme members is low, it may be considered to refrain from setting up a central entity (hub) connecting the members. However, with every additional member joining the scheme the number of connections is growing exponentially. A need for central infrastructure facilitating the exchange of information is therefore a logic alternative, both from a technological as well as from an economic perspective.

Considering the potential number of participating members to the digital euro scheme (approximately 5000 credit institutions in the euro area alone), we would highly advise the eurosystem (or digital euro scheme operator) to take an active role in establishing a central hub and necessary interfaces allowing its members to exchange information. Additionally, technical functionalities provided centrally may have a positive impact on a harmonised and unique customer experience also for chargebacks and disputes.

Key considerations when implementing dispute management processes for both the Eurosystem and intermediaries?

The conditions under which digital euro users are entitled to initiate a dispute resolution process, and eventually obtain a chargeback must be clearly defined. We recommend considering the following conditions as applicable for the entitlement of initiating a dispute process.

**Fraud**
Disputes should be eligible in scenarios where consumers transact with a “fictitious” merchant or the payment is intercepted by fraudster.

**Obvious error**
Disputes should be eligible in scenarios where citizens and retailer may mistakenly proceed with incorrect payments, for example incorrect amount or incorrect beneficiary. Unless the payer is not refunded directly by the payee for the incorrect payment, the payer should be entitled to initiate a dispute. The Eurosystem should consider to centrally implement tools mitigating risks of making erroneous transfers with the provision of a beneficiary ID check. Additionally, detailed information of the parties’ names, payment date and place should be provided by the intermediaries allowing citizen to recognise to whom, where and when they made a payment.

**Breach of contract**
Disputes should be eligible in scenarios where merchants do not fulfil the contracted obligation. Examples: non-delivery, wrong item, damaged item, counterfeit.

For disputes relating to breach of contract, consumers should only be eligible to the formal dispute resolution process after they can prove that they have tried to resolve the request directly with the merchant. We recommend a period of 8 weeks after first documented contact of consumer with merchant before a consumer can initiate the formal dispute process via their intermediary.
Non-eligibility should be established for friendly fraud scenarios\(^1\). Furthermore, scenarios in which the delivered goods or services do not please the consumer (e.g. wrong colour, wrong size, etc) should not be eligible for dispute process initiation either – Consumers must directly contact the merchant to request a return/refund. Merchants should then use data indicating that transactions in questions were correctly authenticated and that products have been shipped and received.

In order to support the above eligibility criteria, we recommend that a dispute resolution process comes with transparent and consistent rules. Additionally, it may have to be considered that the design of the dispute initiation customer experience should come with some friction. The easier the initiation and the potential (wrongful) reimbursement in form of a chargeback, the more the dispute resolution process will be misused for scenarios that were not intended to be covered by the process.

\(^1\) Friendly Fraud refers to fraud that is committed when an individual had knowledge of and/or was complicit with and/or somehow benefited from the transaction on their own account, although the individual reported the transaction as unauthorized (www.verifi.com)