



EUROPEAN CENTRAL BANK

EUROSYSTEM

Digital euro project team

ECB-PUBLIC

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Questions from the digital euro front-end prototype provider information session on 18/07/2022

	Question	Answer
1	Is my understanding correct that you are looking for an intermediated solution - i.e. the front end use cases would simulate both the PSP and the end user front end.	Yes, use cases have to provide the end user front-end and can simulate a PSP in addition. Payment services will be mocked up by the ECB and the ECB will select a minimum of 3 providers who have the capability to deliver this.
2	Will the front-end connect directly with ECB backend? Who will orchestrate external services (e.g. KYC, AML etc)	External services will be orchestrated by the ECB mock-up with the payment service in the beginning and will also be covered by (some of) the front-end prototype providers in addition to the main use case.
3	Does P2P use case include / consider virtual settings (eg both parties in an online community)?	Two P2P use cases have been presented: one which includes transactions between parties which are both online, and one which includes transactions between parties which are both offline.
4	Will service initiation be covered - i.e. secure payment app installation or is it assumed that users are authenticated and focus is more on the transactional/settlement components?	The assumption is that the user has already been onboarded and the focus will be on studying the transactional and settlement design decisions represented in the prototype.

5	Regarding one use case (e.g. eCommerce), which phases of the customer and merchant lifecycle should be implemented? Onboarding, KYC, AML, Payment, Reporting etc.	<p>More information of the functions will be provided to the selected prototype providers in an onboarding package closer to the expected start of the development.</p> <p>The prototype at this stage is focusing on the transaction and settlement processes, we assume users to be onboarded.</p>
6	Is it a 4 corner model or 3 corner ?	Common payment network schemes do not apply directly to the prototype design, as the components of the prototype are already defined (as presented) and the exact functions of the payment services will be further clarified in the onboarding package.
7	What is the link with the EUDIW ?	At this stage, for prototype activities, there is no link to the EUDIW.
8	Will the back-end prototype be blockchain have you decided on the platform for the prototype and or any thinking for interoperability.	For the prototype, providers submit transaction requests to a core settlement engine through an API or a message queue. The specific format of transaction requests will be shared in the onboarding package and subsequent interactions with the selected providers.
9	If one is selected on an individual candidacy, can one still execute the pilot conjointly with another party?	Yes.
10	Will you provide product requirements from the user perspective for each use case?	There will not be detailed requirements from a user perspective.

11	Can you elaborate more on the scope of what is included in the prototype e.g. design, testing and simulation and what are you expecting from the supplier.	<p>Front-end prototype providers are expected to develop a prototype for a specific use case and integrate with the APIs provided by the ECB. The ECB and the provider will be in a continuous dialogue (at least fortnightly) to answer questions and jointly define next steps.</p> <p>Prototype providers are expected to provide:</p> <ul style="list-style-type: none"> ○ A presentation of the front-end prototype incl. functional description ○ A simulation of functions with a demo video ○ A demo environment of the solution available until the end of Q1 2023, for the execution of e.g. (additional) tests, presentations to stakeholders and further internal use. ○ Integration of the front-end solution via the API to the ECB's back-end solution. The integration shall be supported by the Company with technical resources (until the end of Q1 2023), to enable end-to-end testing (i.e. front-end to back-end).
12	Will it be possible to include new features that are currently not available with non digital-euro? tagging currency for example.	Prototype providers can provide additional features which exceed the scope of the use case, given that the use case they have been selected for will also be delivered.
13	Will you be looking to link different use cases? That would also give selected vendors an opportunity to test interoperability.	The current plan does not foresee a link across the use cases, but in mutual agreement between the ECB and the providers this can be done.
14	Is there an expected manner to charge the wallet ? Card rail / Account rail ?	Funding is expected to take place via the ECB core API. It is currently foreseen that this is a form of transaction between an intermediary and user wallet located at the core ledger. This implementation is agnostic to the front-end implementation that interacts through a corresponding PSD2-like API.

15	Will the prototype run in a sandbox or in real production environment?	The prototypes will run in a development environment.
16	Are you equally open to focus on merchant / business user and consumer, or more focused on consumer in this prototyping?	This prototyping exercise focuses on use cases involving consumers and merchants (e.g. at POS)
17	How is the testing conducted? Is it with real customers or just via a demo, e.g. similar to sprint's demo?	Testing will be conducted via demos and using specific test cases. During the prototyping exercise the ECB can approach the provider and offer to use the front-end prototype in a focus group exercise in Q4 2022.
18	And also, how do we learn more about structural components of the prototype (custodial, costs, # of intermediaries)?	No estimations about number of intermediaries or costs are part of this exercise. The current setup of the prototype aims for a custodial wallet model.
19	Are the front-end use cases going to be connected to eIDAS toolbox?	A connection with the eIDAS toolbox is not a requirement but can be proposed by providers during the development.
20	Will the ECB provide branding and/or other UX guidelines or requirements to be complied with (to create a consistent customer experience)	The ECB will not impose strong branding or UX guidelines for the prototype.
21	As a provider is it possible to let the prototype being validated/reviewed by certain merchants (which can be a customer of the provider)?	For confidentiality reasons, the front-end prototypes cannot be shared during the work.
22	Are the expected limitations of holding or other limitations embedded in the API or will the providers implement them individually?	Holding limits will not be imposed by the core API and will be located at the intermediary level of the prototype.
23	In the AML context, will RFIs and SARs features for merchants be included in the core ledger layer?	No.
24	Will the core ledger be a public one with a block explorer available, like Ethereum for example?	For the prototype, providers submit transaction requests to a core settlement engine through an API or a message queue. The specific format of transaction requests will be shared in the onboarding package and subsequent interactions with the selected providers.
25	Is the backend implementation connected to EBSI?	No.

26	Who is supposed to provide the "offline bridge": ECB or front-end provider ?	The ECB.
27	Are there any specific definitions of the desired levels of privacy for the end consumer (across ECB and NCBs?)	The current backend design will accommodate different privacy solutions.
28	Offline payments demand robust and trustworthy end devices. Is there any plan to design and certificate this type of devices?	Indeed, end devices will need to be robust and trustworthy, but certification of devices is not part of the front-end prototyping activity.
29	In case of a consortium made up by more than one responder, do you expect signature by all of them or only by the coordinator?	The ECB expects one signature of the main applicant who acts as a temporary grouping coordinator as stated in the Q&A .
30	Will there be a single approved wallet, or will multiple entities compete to provide alternatives? 1. If multiple providers, how will the ECB support end users engaged in technical integrations required to accept digital euro payments from multiple wallets (e.g., a merchant would have to separately integrate with each wallet provider to support a wallet in the merchant's checkout flow)?	The current plan does not foresee a link across the prototypes for each use case.
31	Does the ECB have a model for enabling merchant to store customer payment details and authorization to enable both streamlined checkout (akin to card on file) and customer-not-present transactions (e.g. subscriptions; delay between Authorization and settlement.	The ECB has no model for enabling merchants to store customer payment details.
32	What's ECB vision on the ongoing transaction costs for using a digital euro and who will pay them?	Transaction costs and who will cover them is not part of the prototyping exercise. The ECB is analysing different compensation and business models, taking into account all involved stakeholders.
33	What is the ECB's vision on dispute resolution (akin to chargebacks or fraud remuneration)? Is there a vision of a tiered system that distinguishes between "cash-like" transactions (with finality) and "card-like" transactions with additional protections?	There is currently no vision of a tiered dispute resolution system that distinguished between "cash-like" and "card-like" transactions.

34	<p>What will be the funding mechanism for an end user's digital euro account? Will end users be allowed to fund them directly from cash or will a bank account be required?</p>	<p>Funding is expected to take place via the ECB core API. It is currently foreseen that this is a form of transaction between an intermediary and user wallet located at the core ledger. This implementation is agnostic to the front-end implementation that interacts through a corresponding PSD2-like API.</p>
35	<p>Does the prototype in the demo environment need to be part of provider's beta ecosystem? basically, we are launching a new PM that is available to use in our devo environment? Or, can we create a prototype eCommerce website just for this prototyping?</p>	<p>The eCommerce prototype does not have to be integrated in the providers beta ecosystem. A prototype eCommerce website can be created for this prototyping.</p>
36	<p>Is the payment services (client1, client2, etc2) belong to ECB or private intermediaries, like PSP today?</p>	<p>Payment services will be provided by the ECB mock-up and <i>can</i> also be covered by the front-end prototype providers in addition to the main use case.</p>