Annex 2: Questionnaire linked to the market research for a potential digital euro implementation

3 February 2023

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Instructions for completing the questionnaire

* When providing **additional attachments** (for e.g. charts or milestone plans), make a clear reference to them in the respective answer field.
* **All questions**: Except for Section 1, your responses (including attachments) should be fully anonymous, meaning you should avoid using trade names which would allow to identify the respondent, etc.
* **Sections 1 and 2**: These sections are mandatory, and you should complete all fields.
* **Section 3**: You should provide answers for every component you indicate in Question 2.1. Components should be considered independently of each other, except when stated otherwise.
* **Section 4**: You should state all costs as net figures in euro, excluding VAT.

Note: Slight changes have been made in this second version of Annex 2. On Q.2.1 on page 4, the second column of the table has been updated to “Development & maintenance” and, on Q.4.1 on page 26 the following wording has been added: “*also including* ***maintenance costs for a period of 5 years***”.

# Participant questions

|  |  |
| --- | --- |
|  | Please provide information about your organisation |
| Full name(s) | Click or tap here to enter text. |
| Address | Click or tap here to enter text. |
| Website | Click or tap here to enter text. |
| Place of registration (if applicable) | Click or tap here to enter text. |
| 2021 annual turnover (if applicable) | Click or tap here to enter text. |
| Number of employees (if applicable) | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please provide information about the contact person |
| Full name | Click or tap here to enter text. |
| Function/title | Click or tap here to enter text. |
| Telephone | Click or tap here to enter text. |
| Email | Click or tap here to enter text. |

# General questions

|  |  |
| --- | --- |
|  | Please use the tick boxes in the table below to indicate which of the Digital euro **Components** you would be in a position to propose a solution to in the context set out in the purpose of this exercise (development only or development, operation & maintenance). |
| **Answer** | |  |  |  |  | | --- | --- | --- | --- | | # | Component | Development & maintenance | Development, maintenance & operation | | 1 | Settlement |  |  | | 2 | DCA Management |  |  | | 3 | Reference Data Management |  |  | | 4 | Data Warehouse |  |  | | 5 | Offline Solution |  |  | | 6 | Access Gateway |  |  | | 7 | Digital euro App |  |  | | 8 | Integrated Banking App SDK |  |  | | 9 | Proxy Lookup |  |  | | 10 | Onboarding Repository |  |  | | 11 | Dispute Management |  |  | | 12 | Fraud and Risk Management |  |  | |

|  |  |
| --- | --- |
|  | Please provide a brief summary of your experience and reference projects (incl. geographical areas, the solution(s) you’ve provided, number of users, number of transactions, etc.) for the components selected in the previous question. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Would the solution involve subcontractors? If yes, what is the estimated share of subcontracted work? In case of different involvement of subcontractors per component, please provide the information on a component level. Please add any further information you consider relevant. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please provide an overall description of the proposed solution, including an architectural overview, covering all the components you indicated above, their interfaces and relevant dependencies. Please also provide a description of the requirements for the components that the solution will need to interface with. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Do you have any further ideas or suggestions regarding how functions have been combined into components? Do you think there are any functional or technical dependencies that haven’t been considered in Annex 1? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe available operating models for the proposed solution and processing services[[1]](#footnote-2). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | How do you ensure that the proposed solution would grant the Eurosystem “Freedom to Operate[[2]](#footnote-3)” while implementing it for the digital euro?1 |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Which licensing and intellectual property (IP) regime(s) would the proposed solution be available under? E.g. would it be an exclusive development for the digital euro component with the resulting IP being transferred to the Eurosystem, or is it an existing solution for which the Eurosystem would acquire a license? In the case of a license would it be exclusive or non-exclusive? In case of alternatively envisaged options, how would this affect the costs quoted in Section 4? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the proposed implementation approach, complete with roadmap (timeline and indicative milestone plan) and expected challenges. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe how cybersecurity requirements are addressed in the proposed solution, including how quantum-resistance qualities are ensured. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe how privacy and data protection requirements are addressed in the proposed solution. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What is the [Product Environmental Footprint (PEF)](https://ec.europa.eu/environment/eussd/pdf/footprint/PEF%20methodology%20final%20draft.pdf) of your solution? How will you minimise your solution’s PEF? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe in detail how your proposed solution would change if it needed to allow a multi-currency functionality (i.e. same-currency transactions for multiple currencies in the same solution)1 |
| **Answer** | Click or tap here to enter text. |

# Component-specific questions

## Settlement

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe in particular how your solution addresses the non-functional requirements described in Annex 1 Section 6.1.4, especially regarding scaling and transaction latency (end-to-end and within the Settlement component)? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe in particular how your solution supports end-user privacy and impedes inferring end users’ payment patterns. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe in particular how your solution enables end users to prove access to their digital euro holdings irrespective of the intermediary they had selected to manage their holdings previously in case they want or need to choose a new intermediary to manage their holdings, e.g. because the previous intermediary suddenly ceases to operate. |
| **Answer** | Click or tap here to enter text. |

## DCA[[3]](#footnote-4) Management

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Reference Data Management

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Data Warehouse

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe how your solution allows scalability over time? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe how a remuneration application would be linked with the data warehouse? Is there any other component where remuneration calculation could be better fit? |
| **Answer** | Click or tap here to enter text. |

## Offline Solution

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | How can we facilitate that payers with offline/peer-to-peer validated means of payment are able to pay at a point of interaction? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Please describe in detail the architecture of the Offline solution, its sub-components and the interfaces between them. Please also describe the protocols used for transactions between devices and for funding and defunding operations.** |
| **Answer** | Click or tap here to enter text. |

## Access Gateway

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Digital euro App

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Integrated Banking App SDK

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Proxy Lookup

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | How could existing proxy look-up solutions be incorporated in the proxy look-up component? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **What are the implications of incorporating existing proxy look-up solutions from a technical point of view?** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Which privacy enhancing techniques and security measures do you propose to use when transmitting and processing proxy lookup data?** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **How might different implementations of GDPR requirements per country affect the implementation of the proxy lookup?** |
| **Answer** | Click or tap here to enter text. |

## Onboarding Repository

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe how your solution could facilitate a possible reuse of existing national databases (e.g. banking account repositories) also for the needs of the digital euro components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Which privacy enhancing techniques and security measures do you propose to use when transmitting and processing relevant data?** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Please explain how your solution would work with different national implementations of GDPR requirements.** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Please describe how it would impact your solution if the Onboarding Repository is needed to support multiple accounts/wallets per end user?** |
| **Answer** | Click or tap here to enter text. |

## Dispute Management

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

## Fraud and Risk Management

|  |  |
| --- | --- |
|  | Would the proposed solution cover all the functional and non-functional requirements of the component? If not, please provide details, reasoning and possible mitigation measures regarding functional gaps. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **development** approach, including the solution architecture, technological stack, infrastructure requirements and further details of integration capabilities (interfaces). |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please describe the **operation and maintenance** approach. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | What [Technology Readiness Level](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf) does the solution have? |
| **Answer** | Choose an item. |

|  |  |
| --- | --- |
|  | Do you have any further comments or suggestions regarding the component? Do you see any synergies/drawbacks when developed in combination with other components? |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **Please describe how your solution applies privacy-enhancing techniques to safeguard the privacy of digital euro end users while providing fraud detection and prevention capabilities.** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | **How would such a fraud and risk management component integrate with and be a complement to fraud management solutions used by intermediaries?** |
| **Answer** | Click or tap here to enter text. |

# Cost questions

|  |  |
| --- | --- |
|  | Based on the performance scenarios (S / M / L) specified in Annex 1, please provide the indicative overall **cost** (as a single figure) and the required **time** for the **development** of each component you indicated in Question 2.1[[4]](#footnote-5), also including **maintenance costs for a period of 5 years**. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Development & maintenance costs (kEUR, excl. VAT) | | | | |
| Scenario *(see Section 2 in Annex 1 for the description)* | | S | M | L |
| 1 | **Settlement** | Enter here. | Enter here. | Enter here. |
| 2 | **DCA Management** | Enter here. | Enter here. | Enter here. |
| 3 | **Reference Data Management** | Enter here. | Enter here. | Enter here. |
| 4 | **Data Warehouse** | Enter here. | Enter here. | Enter here. |
| 5 | **Offline Solution** | Enter here. | Enter here. | Enter here. |
| 6 | **Access Gateway** | Enter here. | Enter here. | Enter here. |
| 7 | **Digital euro App** | Enter here. | Enter here. | Enter here. |
| 8 | **Integrated Banking App SDKs** | Enter here. | Enter here. | Enter here. |
| 9 | **Proxy Lookup** | Enter here. | Enter here. | Enter here. |
| 10 | **Onboarding Repository** | Enter here. | Enter here. | Enter here. |
| 11 | **Dispute Management** | Enter here. | Enter here. | Enter here. |
| 12 | **Fraud and Risk Management** | Enter here. | Enter here. | Enter here. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Estimated development time (working days)[[5]](#footnote-6) | | | | |
| Scenario *(see Section 2 in Annex 1 for description)* | | S | M | L |
| 1 | **Settlement** | Enter here. | Enter here. | Enter here. |
| 2 | **DCA Management** | Enter here. | Enter here. | Enter here. |
| 3 | **Reference Data Management** | Enter here. | Enter here. | Enter here. |
| 4 | **Data Warehouse** | Enter here. | Enter here. | Enter here. |
| 5 | **Offline Solution** | Enter here. | Enter here. | Enter here. |
| 6 | **Access Gateway** | Enter here. | Enter here. | Enter here. |
| 7 | **Digital euro App** | Enter here. | Enter here. | Enter here. |
| 8 | **Integrated Banking App SDKs** | Enter here. | Enter here. | Enter here. |
| 9 | **Proxy Lookup** | Enter here. | Enter here. | Enter here. |
| 10 | **Onboarding Repository** | Enter here. | Enter here. | Enter here. |
| 11 | **Dispute Management** | Enter here. | Enter here. | Enter here. |
| 12 | **Fraud and Risk Management** | Enter here. | Enter here. | Enter here. |

|  |  |
| --- | --- |
|  | Please provide information regarding the breakdown of **development** **costs**, including the main cost drivers (e.g. licences, infrastructure costs, human resources), for each component you indicated in Question 2.1. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Based on the performance scenarios (S / M / L) specified in Annex 1, please provide the indicative **annual cost** (as a single figure) for the **operation and maintenance** of each component you indicated in Question 2.1[[6]](#footnote-7). |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Annual operating and maintenance costs (kEUR, excl. VAT) | | | | |
| Scenario *(see Section 2 in Annex 1 for description)* | | S | M | L |
| 1 | **Settlement** | Enter here. | Enter here. | Enter here. |
| 2 | **DCA Management** | Enter here. | Enter here. | Enter here. |
| 3 | **Reference Data Management** | Enter here. | Enter here. | Enter here. |
| 4 | **Data Warehouse** | Enter here. | Enter here. | Enter here. |
| 5 | **Offline Solution** | Enter here. | Enter here. | Enter here. |
| 6 | **Access Gateway** | Enter here. | Enter here. | Enter here. |
| 7 | **Digital euro App** | Enter here. | Enter here. | Enter here. |
| 8 | **Integrated Banking App SDKs** | Enter here. | Enter here. | Enter here. |
| 9 | **Proxy Lookup** | Enter here. | Enter here. | Enter here. |
| 10 | **Onboarding Repository** | Enter here. | Enter here. | Enter here. |
| 11 | **Dispute Management** | Enter here. | Enter here. | Enter here. |
| 12 | **Fraud and Risk Management** | Enter here. | Enter here. | Enter here. |

|  |  |
| --- | --- |
|  | Please provide information on the breakdown of **operating and maintenance costs**, including the main cost drivers (e.g. licences, infrastructure costs, human resources), for each component you indicated in Question 2.1. |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | Please provide information on any other volumetric indicators that will mainly impact **operating and maintenance costs.** |
| **Answer** | Click or tap here to enter text. |

|  |  |
| --- | --- |
|  | If you are in a position to provide several components to the Eurosystem, would there be any cost advantages or other synergies compared with the “standalone” cost per component indicated in Questions 4.1 and 4.3? |
| **Answer** | Click or tap here to enter text. |

1. In case of different answers per proposed component, please indicate this in your answer. [↑](#footnote-ref-2)
2. Freedom to operate: the ability to deploy a product or process without infringing a third party's valid IPRs. [↑](#footnote-ref-3)
3. DCA = Dedicated Cash Account [↑](#footnote-ref-4)
4. In case of synergies when providing multiple components please provide this information in Section 4.7. [↑](#footnote-ref-5)
5. Please provided the estimated duration needed to the develop/customize the respective solution and NOT the number of person-days to conduct the work. [↑](#footnote-ref-6)
6. In case of synergies when providing multiple components please provide this information in Section 4.7. [↑](#footnote-ref-7)