1. Buyer

1.1. Buyer
Official name: European Central Bank
Legal type of the buyer: EU institution, body or agency
Activity of the contracting authority: Economic affairs

2. Procedure

2.1. Procedure
Title: Banknote Perception Studies
Description: Provision of works and services under three lots related to banknote perceptual experience and counterfeit discrimination - Lot 1: Biometrics (visual), Lot 2: Predictive perception (visual) and Lot 3: Haptics
Procedure identifier: 973db689-d0e4-4515-8e27-9ef5859a544b
Internal identifier: PRO-006505
Type of procedure: Open
The procedure is accelerated: no
Main features of the procedure: The tender procedure shall be open on equal terms to all natural or legal persons resident or located in the European Union and to all natural and legal persons resident or located in a country which has ratified the World Trade Organisation Agreement on Government Procurement or has concluded with the European Union a bilateral agreement on procurement under the conditions laid down in the said agreements. The tender procedure is conducted in accordance with Decision ECB/2016/2 laying down the rules on procurement (as amended), available at https://www.ecb.europa.eu/ecb/legal/1001/procurement/html/index.en.html And in EUR-Lex: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02016D0002-20200501. The detailed features and terms and conditions of the procedure can be found in the procurement documents.

2.1.1. Purpose
Main nature of the contract: Services
Main classification (cpv): 73120000 Experimental development services
Additional classification (cpv): 73100000 Research and experimental development services

2.1.2. Place of performance
Postal address: European Central Bank Sonnemannstrasse 22
Town: Frankfurt am Main
Postal code: 60314
Country subdivision (NUTS): Frankfurt am Main, Kreisfreie Stadt (DE712)
Country: Germany

2.1.2. Place of performance
Postal address: European Central Bank Sonnemannstrasse 22
Town: Frankfurt am Main
Postcode: 60314
Country subdivision (NUTS): Frankfurt am Main, Kreisfreie Stadt (DE712)
Country: Germany

2.1.3. **Value**
- Estimated value excluding VAT: 1 500 000,00 EUR
- Maximum value of the framework agreement: 1 800 000,00 EUR

2.1.4. **General information**
Additional information: This tender procedure is conducted via the ECB’s electronic tendering system (e-tendering) which can be accessed via the following internet address: http://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html If you have not used the ECB’s electronic tendering system before, you need to register via the above link (click on ‘Register’). Subsequently to the registration, you will receive an automated notification with your user credentials to log in (click on ‘Login’) and to access the tender documentation. Please note that: — A registration to the above system is only required once and you can reuse your user credentials in all future procedures of the ECB which are conducted via the above system. Therefore, please keep your user credentials for the future; — In case you should have participated in previous ECB tender procedure(s) in the past which were conducted via the ECB’s prior online system, you nevertheless need to register once to the ECB’s electronic tendering system under the above address; — Your mere registration does not constitute an application/tender. You must submit your application/tender via the ECB’s electronic tendering system as further instructed in the application/tender documentation. The system reference number for the above procurement is:

Lot 1: RFX-PT-2024-000014: PRO-006505-L1R1-Biometrics (visual)
Lot 2: RFX-PT-2024-000015: PRO-006505-L2R1-Predictive perception

To download the tender documents, log on to the ECB’s electronic tendering system with your login and password. Expand the field ‘Public Tenders – Upcoming Events’. Click on ‘Click to request an invitation to this event’ for the above procedure and close the new window which opens. Once the request is completed (this can take a few minutes), the status of the participation request will change to ‘Invited’ and the RFx documentation will be accessible via the RFx tab. Under the above link you also find user guides for detailed information on how to use the system and contact details for technical support. Should you require technical help when using the system, please contact the ECB’s technical support team at sourcing.support@ecb.europa.eu by quoting the reference number and the problem experienced. Any other queries relating to this procurement procedure and the content of the procurement documentation shall be submitted as message via the ECB’s e-tendering system (under the tab ‘Discussion’). The ECB endeavours to answer all queries as quickly as possible but cannot guarantee a minimum time response. The ECB shall not be bound to reply to queries received less than seven calendar days before the time-limit for the submission of tenders.

Legal basis:
Directive 2014/24/EU
[LEAVE EMPTY]

2.1.5. **Terms of procurement**
- Terms of submission:
  - Maximum number of lots for which one tenderer can submit tenders: 3
- Terms of contract:
Maximum number of lots for which contracts can be awarded to one tenderer: 3

2.1.6. **Grounds for exclusion:**
Purely national exclusion grounds: Based on Art. 30 of the ECB Procurement rules (Decision ECB/2016/2, as amended)

5. Lot

5.1. **Lot:** LOT-0001
Title: PRO-006505 - Lot 1: Biometrics (visual)
Description: Provision of biometrics-assisted perceptual experience and counterfeit discrimination studies, including the continuous review and improvement of the methodology, using sample sets provided by the ECB, for selected areas. The successful Tenderer shall provide the assessments by selecting and undergoing the assessments with a representative sample of participants.
Internal identifier: Lot 1

5.1.1. **Purpose**
Main nature of the contract: Services
Main classification (cpv): 73120000 Experimental development services
Additional classification (cpv): 73200000 Research and development consultancy services
Options:
Description of the options: The contract is not subject to renewal.

5.1.3. **Estimated duration**
Duration: 48 Month

5.1.5. **Value**
Estimated value excluding VAT: 1 000 000,00 EUR
Maximum value of the framework agreement: 1 200 000,00 EUR

5.1.6. **General information**
The names and professional qualifications of the staff assigned to perform the contract must be given: Not required
Procurement Project not financed with EU Funds.
This procurement is also suitable for small and medium-sized enterprises (SMEs)
Additional information: [insert any other information relevant for the lot]

5.1.9. **Selection criteria**
Criterion:
Type: Economic and financial standing
Name: Professional, Financial, and Technical Capacity criteria
Description: As specified in the procurement documentation
Use of this criterion: Used
The criteria will be used to select the candidates to be invited for the second stage of the procedure
Information about the second stage of a two-stage procedure:
The buyer reserves the right to award the contract on the basis of the initial tenders without any further negotiations

5.1.10. **Award criteria**
Criterion:
Type: Quality
Description: Quality of the technical offer
Weight (percentage, exact): 60

Criterion:
Type: Price
Description: Financial offer
Weight (percentage, exact): 40

5.1.11. Procurement documents
Access to certain procurement documents is restricted
Languages in which the procurement documents are officially available: English
Deadline for requesting additional information: 22/04/2024 12:00:00 (UTC+2)
Ad hoc communication channel:
Name: ECB e-tendering platform

5.1.12. Terms of procurement
Terms of submission:
Electronic submission: Required
Languages in which tenders or requests to participate may be submitted: English
Electronic catalogue: Not allowed
Variants: Not allowed
Tenderers may submit more than one tender
Deadline for receipt of tenders: 29/04/2024 12:00:00 (UTC+2)
Deadline until which the tender must remain valid: 6 Month
Terms of contract:
Electronic invoicing: Required
Information about review deadlines: Within 10 days of receipt of the notification in accordance with Article 34(1) or the first sentence of Article 34(3) of Decision ECB/2016/2 laying down the rules on public procurement. Further requirements are outlined in Article 39 of this Decision. A complaint to the European Ombudsman does not affect the deadline for lodging appeals.

5.1.15. Techniques
Framework agreement: Framework agreement, without reopening of competition
Maximum number of participants: 1
Information about the dynamic purchasing system: No dynamic purchase system

5.1.16. Further information, mediation and review
Mediation organisation: The European Ombudsman
Review organisation: European Central Bank
Organisation providing more information on the review procedures: European Central Bank

5.1. Lot: LOT-0002
Title: PRO-006505 - Lot 2: Predictive perception (visual)
Description: The successful Tenderer shall, using or providing predictive software, predict visual attention on both static and dynamic samples provided by the ECB (e.g. https://www.ecb.europa.eu/euro/banknotes/denominations/html/index.en.html#es2-100) to cover the following areas: a. Comparison of different banknotes (concept and circulating) in terms of
salience prediction (defining Areas of Interest and assessing their relevant salience) and visual clutter; b. Single public feature assessment including testing of different embodiments (e.g. define the most effective size, position, or colour change for optically variable features) for optimal effect (salience); c. Reiteration of the assessment of (a) and (b) upon introduction of graphic changes.

Internal identifier: Lot 2

5.1.1. **Purpose**
Main nature of the contract: Services
Main classification (cpv): 73120000 Experimental development services
Additional classification (cpv): 73200000 Research and development consultancy services
Options: Description of the options: The contract is not subject to renewal.

5.1.3. **Estimated duration**
Duration: 48 Month

5.1.4. **Renewal**
The buyer reserves the right for additional purchases from the contractor, as described here: [If contract is subject to renewal, please provide information.]

5.1.5. **Value**
Estimated value excluding VAT: 250 000,00 EUR
Maximum value of the framework agreement: 300 000,00 EUR

5.1.6. **General information**
The names and professional qualifications of the staff assigned to perform the contract must be given: Not required
Procurement Project not financed with EU Funds.
This procurement is also suitable for small and medium-sized enterprises (SMEs)
Additional information: [insert any other information relevant for the lot]

5.1.9. **Selection criteria**
Criterion:
Type: Economic and financial standing
Name: Professional, Financial, and Technical Capacity criteria
Description: As specified in the procurement documentation
Use of this criterion: Used
The criteria will be used to select the candidates to be invited for the second stage of the procedure
Information about the second stage of a two-stage procedure:
The buyer reserves the right to award the contract on the basis of the initial tenders without any further negotiations

5.1.10. **Award criteria**
Criterion:
Type: Quality
Description: Quality of the technical offer
Weight (percentage, exact): 60
Description: Financial offer
Weight (percentage, exact): 40

5.1.11. Procurement documents
Access to certain procurement documents is restricted
Languages in which the procurement documents are officially available: English
Deadline for requesting additional information: 22/04/2024 12:00:00 (UTC+2)
Ad hoc communication channel:
Name: ECB e-tendering platform

5.1.12. Terms of procurement
Terms of submission:
Electronic submission: Required
Languages in which tenders or requests to participate may be submitted: English
Electronic catalogue: Not allowed
Variants: Not allowed
Deadline for receipt of tenders: 29/04/2024 12:00:00 (UTC+2)
Deadline until which the tender must remain valid: 6 Month
Terms of contract:
Electronic invoicing: Required
Information about review deadlines: Within 10 days of receipt of the notification in accordance with Article 34(1) or the first sentence of Article 34(3) of Decision ECB/2016/2 laying down the rules on public procurement. Further requirements are outlined in Article 39 of this Decision. A complaint to the European Ombudsman does not affect the deadline for lodging appeals.

5.1.15. Techniques
Framework agreement: Framework agreement, without reopening of competition
Maximum number of participants: 1
Information about the dynamic purchasing system: No dynamic purchase system

5.1.16. Further information, mediation and review
Mediation organisation: The European Ombudsman
Review organisation: European Central Bank
Organisation providing more information on the review procedures: European Central Bank

5.1. Lot: LOT-0003
Title: PRO-006505 - Lot 3: Haptics
Description: The successful Tenderer shall conduct studies and develop experimental procedures to assess the hapticity of banknotes, including continuous review and improvement of the methodology. The studies shall focus on users’ specific sensory capabilities (e.g., visual impairment or blindness). a. Assessment of both existing and new tactile features b. Assessment of possible combinations of tactile features in banknote designs to determine the most effective arrangement in terms of hapticity. c. Determining the best tactile features for discrimination between denominations (e.g. including positions on each banknote) The assessments described above shall be carried out by a representative focus group in terms of age / gender / educational background.
Internal identifier: Lot 3
5.1.1. **Purpose**
Main nature of the contract: Services
Main classification (cpv): 73120000 Experimental development services
Additional classification (cpv): 73200000 Research and development consultancy services
Options:
Description of the options: The contract is not subject to renewal.

5.1.3. **Estimated duration**
Duration: 48 Month

5.1.4. **Renewal**
The buyer reserves the right for additional purchases from the contractor, as described here:
[If contract is subject to renewal, please provide information.]

5.1.5. **Value**
Estimated value excluding VAT: 250 000,00 EUR
Maximum value of the framework agreement: 300 000,00 EUR

5.1.6. **General information**
The names and professional qualifications of the staff assigned to perform the contract must be given: Not required
Procurement Project not financed with EU Funds.
This procurement is also suitable for small and medium-sized enterprises (SMEs)
Additional information: [insert any other information relevant for the lot]

5.1.9. **Selection criteria**
Criterion:
Type: Economic and financial standing
Name: Professional, Financial, and Technical Capacity criteria
Description: As specified in the procurement documentation
Use of this criterion: Used
The criteria will be used to select the candidates to be invited for the second stage of the procedure
Information about the second stage of a two-stage procedure:
The buyer reserves the right to award the contract on the basis of the initial tenders without any further negotiations

5.1.10. **Award criteria**
Criterion:
Type: Quality
Description: Quality of the technical offer
Weight (percentage, exact): 60

Criterion:
Type: Price
Description: Financial offer
Weight (percentage, exact): 40

5.1.11. **Procurement documents**
Access to certain procurement documents is restricted
Languages in which the procurement documents are officially available: English
Deadline for requesting additional information: 22/04/2024 12:00:00 (UTC+2)
Ad hoc communication channel:
Name: ECB e-tendering platform

5.1.12. Terms of procurement
Terms of submission:
Electronic submission: Required
Languages in which tenders or requests to participate may be submitted: English
Electronic catalogue: Not allowed
Variants: Not allowed
Deadline for receipt of tenders: 29/04/2024 12:00:00 (UTC+2)
Deadline until which the tender must remain valid: 6 Month
Terms of contract:
Electronic invoicing: Required
Information about review deadlines: Within 10 days of receipt of the notification in accordance with Article 34(1) or the first sentence of Article 34(3) of Decision ECB/2016/2 laying down the rules on public procurement. Further requirements are outlined in Article 39 of this Decision. A complaint to the European Ombudsman does not affect the deadline for lodging appeals.

5.1.15. Techniques
Framework agreement: Framework agreement, without reopening of competition
Maximum number of participants: 1
Information about the dynamic purchasing system: No dynamic purchase system

5.1.16. Further information, mediation and review
Mediation organisation: The European Ombudsman
Review organisation: European Central Bank
Organisation providing more information on the review procedures: European Central Bank

8. Organisations

8.1. ORG-0004
Official name: European Central Bank
Registration number: 0001
Postal address: Sonnemannstrasse 22
Town: Frankfurt am Main
Postcode: 60314
Country subdivision (NUTS): Frankfurt am Main, Kreisfreie Stadt (DE712)
Country: Germany
Contact point: Central Procurement Office
Email: procurement@ecb.europa.eu
Telephone: +49 69 13440
Internet address: http://www.ecb.europa.eu
Other contact points:
Official name: Procurement Review Body of the European Central Bank, c/o Legal Advice Team
Department: http://www.ecb.europa.eu
Postal address: Sonnemannstrasse 22
Town: Frankfurt am Main
Postcode: 60314
Country subdivision (NUTS): Frankfurt am Main, Kreisfreie Stadt (DE712)
Country: Germany
Contact point: Legal Advice Team
Email: LegalServices@ecb.europa.eu
Telephone: +49 6913440
Fax: +49 6913446886

**Roles of this organisation:**
Buyer
Review organisation
Organisation providing more information on the review procedures

### 8.1. ORG-0006
Official name: The European Ombudsman
Registration number: 0002
Postal address: 1 avenue du Président Robert Schuman, CS 30403
Town: Strasbourg
Postcode: 67001
Country subdivision (NUTS): Bas-Rhin (FRF11)
Country: France
Email: eo@ombudsman.europa.eu
Telephone: +33 3 88 17 23 13
Internet address: [https://www.ombudsman.europa.eu](https://www.ombudsman.europa.eu)

**Roles of this organisation:**
Mediation organisation

### 11. Notice information

#### 11.1. Notice information
Notice identifier/version: b8249a6e-a6c6-45fc-8fba-e29e44302ab3 - 01
Form type: Competition
Notice type: Contract or concession notice – standard regime
Notice dispatch date: 22/03/2024 15:12:13 (UTC)
Languages in which this notice is officially available: English

#### 11.2. Publication information
Notice publication number: 180721-2024
OJ S issue number: 61/2024
Publication date: 26/03/2024