

**Germany – Experimental development services – Banknote Perception Studies**

OJ S 61/2024 26/03/2024

**Contract or concession notice – standard regime****Services**

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**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

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**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

Postcode: 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 • Lot 3: RFX-PT-2024-000016: PRO-006505-L3R1-Haptics 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](mailto: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

<http://data.europa.eu/eli/dec/2016/245/2020-05-01> - Consolidated text: Decision (EU) 2016 /245 of the European Central Bank of 9 February 2016 laying down the rules on procurement (ECB/2016/2) (recast)

[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

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**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)  
Information about restricted documents is available at: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>  
Ad hoc communication channel:  
Name: ECB e-tendering platform  
URL: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>

#### **5.1.12. Terms of procurement**

Terms of submission:  
Electronic submission: Required  
Address for submission: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>  
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

saliency prediction (defining Areas of Interest and assessing their relevant saliency) 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 (saliency); 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

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)  
Information about restricted documents is available at: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>  
Ad hoc communication channel:  
Name: ECB e-tendering platform  
URL: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>

#### **5.1.12. Terms of procurement**

Terms of submission:  
Electronic submission: Required  
Address for submission: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>  
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)

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Ad hoc communication channel:

Name: ECB e-tendering platform

URL: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>

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Terms of submission:

Electronic submission: Required

Address for submission: <https://www.ecb.europa.eu/ecb/jobsproc/sourcing/html/index.en.html>

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**

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### **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](mailto:procurement@ecb.europa.eu)

Telephone: +49 69 13440

Internet address: <http://www.ecb.europa.eu>

Buyer profile: <https://www.ecb.europa.eu/ecb/jobsproc/tenders/html/index.en.html>

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](mailto: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](mailto:eo@ombudsman.europa.eu)  
Telephone: +33 3 88 17 23 13  
Internet address: <https://www.ombudsman.europa.eu>

**Roles of this organisation:**

Mediation organisation

11. Notice information

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**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