

## **Call for Tender n° 3/2025**

### **Design and Implementation of the EPOS BACK-OFFICE TOOL**

**EPOS ON HORIZON-INFRA-2023-DEV-01 Grant agreement ID: 101131592**



## 1. General Information

EPOS (European Plate Observing System, [www.epos-eu.org](http://www.epos-eu.org)) is a pan-European research infrastructure dedicated to integrating the data, services, and facilities of the solid Earth science research communities in Europe. Its mission is to ensure the sustainable use and re-use of multidisciplinary solid Earth science data and products, fostering state-of-the-art research and innovation. EPOS is committed to establishing and underpinning sustainable and long-term access to solid Earth science data and services, integrating diverse European research infrastructures under a common federated framework. EPOS ERIC is the legal entity established by the European Commission to coordinate and integrate national and international research infrastructures, forming the EPOS Delivery Framework. Based in Rome, Italy, EPOS ERIC comprises 19 Members: Austria, Belgium, Bulgaria, Croatia, Denmark, France, Greece, Iceland, Italy, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom, and 1 Observer: Germany. The governing body of EPOS ERIC is the General Assembly.

## 2. Tendering information

### Purpose

The European Plate Observing System—European Research Infrastructure Consortium (EPOS ERIC) plans to finalise a service contract with a specialised economic operator for the design and implementation of the EPOS ERIC Back-office Tool according to the EPOS ERIC Procurement Rules and the principles of transparency, adequate publicity, non-discrimination, equal treatment, mutual recognition, and proportionality. This Call for Tender includes a description of the required services and the procedures for participating in the tendering process.

### The subject of the contract

The awarded contractor will be required to design and implement the EPOS Back-office tool. The requirements outlined in this document, in the Technical Specification (Annexe A), and in the accompanying documentation will constitute minimum, non-derogable requirements and may be subject exclusively to enhancement proposals.

### Duration and maximum volume of the Contract

The contract duration will be sixteen months from the date of signing and will expire no later than February 28, 2027. The service schedule is outlined in Annexe 1.

For this contract, the maximum amount for the starting bid is estimated at EUR 75,000.00 (seventy-five thousand/00). This amount will encompass the remuneration and all expenses for services rendered under the contract. No price revisions to the agreement shall be permitted, except for significant increases in audit activities that the Parties must mutually agree upon. Costs incurred in preparing and submitting tenders are the responsibility of the tenderers and cannot be reimbursed. The price will include all remuneration, fees, and costs associated with meetings, travel, expenses, general and indirect costs, and administrative overheads. However, the price should be quoted exclusive of all duties, taxes, other charges (including social security and welfare contributions), and any additional costs incurred while performing its activities.

### Methods of execution

The Contractor shall perform the activities covered by this contract in a professional manner, at its own care and expense, fully complying with the procedures and timelines outlined in this document, in the Technical Specification (Annexe B), and in the related annexes, as well as—where compatible and/or offering improvements for EPOS ERIC—following the proposal submitted during the tender process. At the start of the service, the Contractor shall organise a startup meeting involving the project managers to establish a roadmap for all activities to be carried out under the project, adhering to the provisions of the tender documents and the proposal submitted during the



tender. In any case, the Parties may, at any time and for any reason, agree to specific modifications in the execution of the contractual activities as described above, without any additional cost to EPOS ERIC. The Contractor agrees to comply with all strategic and operational instructions related to the execution of the contractual activities provided by EPOS ERIC. The Contractor must promptly notify EPOS ERIC of any circumstances that may affect the performance of the activities outlined in the contract, including any changes in its organisational structure involved in the execution of the contract. Throughout the contract, the Contractor is also required to provide EPOS ERIC with any information, updates, clarifications, data, and documentation that may be requested. In performing the contract, the Contractor agrees to comply with all applicable technical, health, hygiene, and safety regulations currently in force, as well as those that may be issued during the term of the contract. Any additional costs arising from the need to comply with such regulations—even if they come into force after the contract is signed—shall be borne exclusively by the Contractor and shall be deemed fully covered by the agreed-upon contract price. Therefore, the Contractor may not claim additional compensation and shall assume all related risks. In light of the above, the Contractor expressly agrees to indemnify and hold harmless the Contracting Authority from any consequences resulting from the Contractor's failure to comply with applicable technical, safety, hygiene, and health regulations, including any that may be issued during the term of the contract.

#### Compliance with applicable law

If awarded when submitting the offer and throughout the assignment years, the tender must comply with relevant environmental, social, and labour law obligations set forth by Union law, Italian legislation, collective agreements, or international environmental, social security, and labour conventions. Compliance must be verified regarding fiscal matters.

#### Subcontracting

The contract shall not be subcontracted for any activities or portions of the contract.

### 3. Participation requirements

All economic operators specialising in the subject of this Tender may participate in this procurement procedure, provided that at the time of submitting their offer, they meet the following participation requirements:

#### 3.1 Financial requirements

- a) **Registration in the Register of Companies** or one of the professional or commercial registers for activities related to the services covered by this tender.
- b) Achievement over the last three years includes a **turnover of at least €200.000,00 (two hundred thousand euros) per year specific to portals or software development**. This should include **a list of contracts** signed for the services related to the contract during the previous three financial years, each amounting to at least EUR 200,000.00 (two hundred thousand euros) per year. The list must also specify the amount, date, and whether the services were provided to public or private recipients.

If a tenderer cannot provide one or more of the above documents for any exceptional reason deemed justified by EPOS ERIC, they may demonstrate their economic and financial capacity through any other document considered appropriate by EPOS ERIC. In any case, EPOS ERIC must be notified of the reason for the missing documentation and its proper justification. EPOS ERIC reserves the right to request additional documents to verify the tenderer's economic and financial capacity.

#### 3.2 Technical and professional capacity criteria and evidence

Tenderers must:



- Operate with well-trained personnel to ensure that service objectives are met and activities are correctly executed, thereby guaranteeing the regularity and continuity of service provision.
- Demonstrate their ability to write reports in English.
- Ensure that their standards regarding all security matters, including but not limited to physical security, data security, and virus protection, always comply with the highest possible standards, best practices, and any relevant legislation or code of practice with which they are bound to comply.

Technical and professional capacity involves delivering the curriculum or a presentation by at least two team members who offer services. CVs or presentations should include details about work experience, qualifications, and language skills.

#### 4. Offer presentation procedure

The bidder must send, under penalty of exclusion, a sealed envelope to EPOS ERIC – Via di Vigna Murata 605 – 00143 Rome, no later than 12:00 p.m. on September 30th, 2025. The envelope should be sealed and signed across the flaps, and it must clearly display the name of the bidder along with the following note on the outside: "PROCEDURE FOR THE ASSIGNMENT OF THE EPOS BACK-OFFICE TOOL."

Inside the envelope, there must be three separate envelopes, under penalty of exclusion:

1. **Envelope A: Administrative Offer** containing:
  - Declaration on Honour (Annexe 1);
  - Tender Submission Form (Annexe 2);
  - Registration in the Register of Companies;
  - Specific turnover of EUR 200.000,00 (2022, 2023, 2024);
  - List of contracts.
2. **Envelope B: Technical Offer** containing 1) a portfolio with at least three works that are relevant to the bid; 2) CVs of at least two of the project team who will deliver the service 3) the project proposal for the development (maximum 20 slides/pages) of a comprehensive schedule that includes the activities of conception, design, development, project management, graphic and technical implementation, testing and training plan. The successful tenderer will be responsible for all tasks related to producing the layout and timeline, including migration, loading, and training activities. The document should also include a paragraph outlining potential complementary enhancements that may be offered, free of charge for EPOS ERIC. Please note that these documents will be the basis of the evaluation of the technical offer (see the evaluation grid in par5 "Award Evaluation")
3. **Envelope C: Economic Offer** containing the price (VAT net) offered.

All documents must be written in English and signed by the Legal Representative or the person in charge.

The bidder is fully responsible for ensuring that the envelope arrives on time. Only the date and time of receipt by the Tender Office will be considered valid. The date of sending or delivery to any other person or office will not be accepted. Hand delivery is prohibited. Late submissions will not be considered or opened, regardless of the reason for the delay. EPOS ERIC is not liable for postal delays or any other delivery issues that prevent the documents from arriving on time. Any offer received after the deadline will be rejected.

#### 5. Award Evaluation

The tender will be awarded based on the *best* value-for-money criteria, allocating 80 points to the Technical Offer and 20 points to the Financial Offer, for a total of 100 points out of 100.



In light of the above, an appointed tender committee will evaluate the technical offers according to the assessment criteria and the maximum scores indicated in the table below.

EVALUATION ELEMENTS	Maximum score available (80/100)
<b>Relevance and quality of the three most significant similar projects</b> carried out in the field of web development and implementation over the past three years	15
<b>Team qualifications</b> , based on the quality of proven experience, in relation to the service to be delivered while complying with the minimum experience requirements set out in the Technical Specifications	10
<b>Project development and implementation</b>	
- Project Timeline (timeframes and implementation phases)	10
- Project Proposal	25
- Training Plan	10
<b>Complimentary enhancements</b> value-added ICT improvements at no additional cost	10

Only bidders who score at least 50 points for the technical offer will have their economic offer evaluated.

EVALUATION ELEMENTS	Maximum score available (20/100)
<b>Economic Offer</b>	20

After evaluating the quality of the tenders, the tenders are ranked using the formula below to determine which tender offers the best value for money.

<p align="center"> <b>Score for tender X =</b>            (cheapest price / price of tender X * 20)            +            (total quality score (out of 100) / 100 * 80)         </p>
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Across Italy, the transaction is exempt from VAT under Article 72, paragraph 1, letter f) of DPR 633/72, as it is performed on behalf of EPOS ERIC, an international organisation. The price must be quoted in euros and will not be subject to revision. Costs incurred in the preparation and submission of tenders are the responsibility of the tenderers and cannot be reimbursed. The tenderer will submit the tender and conduct all necessary activities related to the tender process, including fully supporting any due diligence requirements at its own expense. EPOS ERIC will not be liable for any bid costs, expenditures, work, or efforts incurred by a tenderer while proceeding with or participating in this procurement, including if the procurement process is terminated without an award.

In delivering the services, the tenderer must ensure the highest quality standards, of which EPOS ERIC will be the sole evaluator.

EPOS ERIC may, at its discretion, extend the closing date and time for the tender. The selection procedure will be based on equal treatment, fairness, and transparency. An evaluation team will be established to award the contract and assess the offers.

All applicants will receive acknowledgement of their tender receipt and will be informed by email of the outcomes of their offer selection process within two weeks after the evaluation procedure concludes. Tenderers should provide a valid email address and contact details in the tender and check this email address regularly.



EPOS ERIC is not obligated to provide reasons for its decision to shortlist, accept, or reject any tender. EPOS ERIC reserves the right to conclude the tender process or to choose not to select a successful tenderer.

EPOS ERIC will not be contractually bound to a bidder for this tender until EPOS ERIC and the selected winner have entered into a written contract.

## **6. Accuracy of proposal**

The tender must be clear, concise, and complete. Tenderers are advised to check the accuracy of their submissions before returning them, paying particular attention to clerical errors and omissions. Tenderers will not be permitted to amend proposals after the proposed return date, except as part of any proposal clarification process initiated by EPOS ERIC. EPOS ERIC reserves the right to mark a tenderer down or exclude them from the procurement if their tenders contain any ambiguities, caveats, or lack of clarity. Tenderers should submit only the information necessary to respond effectively to this call. Tenders will be evaluated based on the information submitted by the tenderers only before the deadline for tender submission.

## **7. Confidentiality and conflict of interest**

The tenderers agree not to use, disclose, or communicate any confidential information related to EPOS ERIC to third parties at any time, whether before, during, or after the termination of the service contract. This restriction will remain in effect indefinitely after the termination of the contract. To maintain the independence of the terms of the agreement, the winning tenderer will sign a declaration certifying that they have no conflict of interest regarding the tasks to be undertaken and that they will inform EPOS ERIC if this status changes.

## **8. Terms and conditions**

This invitation to tender is not binding on EPOS ERIC. Its contractual obligation begins only upon the successful tenderer's signature of the awarded contract. EPOS ERIC may cancel the award procedure up to the point of signature without the candidates or tenderers having the right to claim any compensation. This decision must be substantiated, and the candidates or tenderers must be notified. Similarly, EPOS ERIC reserves the right to reject any proposals, solicit new bids, abandon the need for services, or amend this Call for Tender at any time before executing the written contract.

EPOS ERIC retains the right to waive any formalities in the tender process. EPOS ERIC shall not be liable for any compensation regarding tenderers whose tenders have not been accepted or ranked, nor shall it be liable if it decides not to award the contract. The Tenderer accepts all the terms and conditions of this Call for Tender by submitting a tender. The Tenderer agrees that EPOS ERIC may copy the proposal to facilitate its evaluation and acknowledges that such copying will not violate the rights of any third party. It will not bring any claims or causes of action against EPOS ERIC based on misunderstandings concerning the information provided or EPOS ERIC's failure, neglect, or otherwise in providing the bidder with pertinent information related to this Call for Tender.

The agreement for services provided will be finalised by signing a contract between the parties. This contract will outline the terms and conditions governing the services offered, including the terms of delivery, invoicing, and banking payment methods, as well as the procedures for contract termination.

## **9. Privacy Statement**

Once EPOS ERIC has received and opened the tender, it becomes its property and shall be treated as confidential. If processing the response to the invitation to tender involves recording and handling personal data (such as names, addresses, and CVs), such data will be processed in accordance with Article 13 of the REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons concerning the processing of personal data and the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [1]. EPOS will treat your data with respect. The tenderer can contact EPOS at



any time to revoke consent for the storage and use of their data by emailing [epos-eric@pec.it](mailto:epos-eric@pec.it). For more information about EPOS's privacy practices, please read our EPOS Privacy Statement on the EPOS website ([www.epos-ip.org/content/privacy-policy-summary](http://www.epos-ip.org/content/privacy-policy-summary)). Unless indicated otherwise, the responses to the questions and any personal data requested are necessary to evaluate the tender according to the specifications of the invitation to tender. They will be processed solely by EPOS ERIC.

## **10. Contact Person**

Information and any questions regarding the tender should be submitted to the EPOS ERIC Administration Unit, Chief Diana Piras ([diana.piras@epos-eric.eu](mailto:diana.piras@epos-eric.eu)).

Questions must be submitted in English only to clarify the procurement documents and procedures. EPOS ERIC may respond to questions or provide information from tenderers but is not obligated to provide such responses or information to all other tenderers.

## **11. Contracting organisation**

EPOS ERIC

Via di Vigna Murata n. 605

00143 ROME (ITALY)

FISCAL CODE 96409510581

VAT NUMBER IT15152381008

[www.epos-eu.org](http://www.epos-eu.org)

### **ANNEXES:**

- Declaration of Honour (Annexe 1);
- Tender Submission Form (Annexe 2);
- Technical Specifications (Annexe A).



## ANNEXE A - Technical Specification

Technical Specification for the outsourcing of the design and implementation of the EPOS backoffice tool

### 1. Main activities object of the supply

The requested service includes, but is not limited to, the following macro-activities:

- Analysis of functional and non-functional requirements, carried out jointly with the designated EPOS ERIC Team, also through technical meetings and the drafting of specific documents.
- Design of the application architecture and software modules, based on a modular, containerized, and scalable approach.
- Development of the software platform, including front-end, back-end, database, APIs, and integration interfaces with external systems.
- Implementation of an authentication and authorization system, with user profile and access privilege management.
- Development of modules for registry management, reporting, funding, document repository, reporting, and approval workflows (e.g., personnel selection registration forms, supplier registry, data entry forms, etc.).
- Setup and management of development, testing, staging, and production environments, including automated deployments and monitoring tools.
- Drafting of technical documentation and user manuals, in English, in open and editable digital format.
- User training, through theoretical and practical sessions, multimedia tutorials, and user support during the initial operational execution.
- Technical support and maintenance, for at least four months following the final validation of the system.

### 2. Target Audience and Involved Parties

The platform must ensure access to, and consultation of technical data related to EPOS services, integrating them with contractual, financial, and managerial information. The design must include an access management system based on differentiated profiles and user levels, capable of meeting various needs, skills, and interests.

The platform is primarily intended for:

- The EPOS community
- EPOS Developers

Given the sensitivity of some processed information, access to specific sections of the platform will be reserved exclusively for the Executive Coordination Office (ECO).

### 3. Design Principles

The platform must be designed according to the following guiding principles:

- Modularity: each function must be developed as an independent yet integrable module, enabling future system evolution.
- Scalability: the architecture must support load adaptation and the integration of new components without service interruption.



- Interoperability: each component must expose documented APIs and rely on open standards (e.g., REST, JSON, OAuth, SAML).
- Security, Privacy and Compliance: all data must comply with GDPR and cybersecurity best practices (e.g., encryption, access control, audit log). The system shall ensure that appropriate security measures are in place to prevent or mitigate the risks of inappropriate or unlawful behaviours, such as identity theft or the theft of confidential data, in accordance with the “privacy by design” criterion, also through the constant and timely updating of the infrastructure and the provision and implementation of certificates.
- Usability: the user interface must be web-based ensure full compatibility with major browsers and deliver optimal usability across a range of devices (desktop, laptop, tablet, mobile) through responsive and dynamic design. The interface design shall adhere W3C standards and best practices and comply applicable accessibility legislation. It shall also consider usability best practices, including executing beta tests to gather input for optimal user experience.

#### **4. Expected Outputs**

Upon delivery, the Provider must deliver:

- A functioning “Back-Office” platform in the production environment.
- The complete and documented source code, released under an open-source license compatible with EPOS directives.
- The technical, architectural, and system specification documents.
- The user manual and operational guides for end users.
- The training materials and multimedia content.
- A final report of the activities performed, including testing, validation, and training evidence.

#### **5. Description of Required Services**

##### **a. Centralized Registry Management**

The system must support integrated management of the following registries:

- Entities and structures
- Personnel: detailed information on roles, responsibilities, and group membership
- Projects: information on European projects, including progress status and associated funding.
- Agreements: information on operating and completed agreements including progress status and associated funding.

Registry management must include:

- Versioning of changes with full traceability.
- Intuitive interfaces for data entry, editing, and consultation.
- Data import/export in standard formats (e.g., CSV, XML).
- Structured management of entities, European project and funding, agreement and funding, membership fees by country.



#### **b. Reporting Management**

The system must support management of technical and financial reporting, including:

- Reports: automatic generation of technical and financial reports.
- History: revision maintenance and centralized monitoring.

#### **c. Funding Management**

The system must allow:

- Funding Registry: tracking of received and allocated funds, associated with organizations, projects, and cost centers.
- Expenditure Flows: management and visualization of remaining availability.
- Reporting: customizable reports by entity, project, and period.
- Dashboard: interactive charts and financial data summaries.

#### **d. Document Management and Approval Workflow**

The platform must include an advanced document management system to support:

- Upload and archiving by project, type, entity, or working group.
- Automatic versioning with change tracking and revision comparison.
- Full-text search with filters by date, tag, associated entity, and progress status.
- Bulk import with automatic classification rules.
- Online consultation, integrated visualization (e.g., PDF viewer), and permission-regulated downloads.

The document module must also include a configurable approval workflow, allowing:

- Multi-level approval paths based on roles, entities, and document types.
- Approval status tracking (e.g., draft, in review, approved, rejected).
- Electronic signature or approval logging with date, author, and comments.
- Automatic notifications via email and/or user interface for deadlines, action requests, changes.
- Approval process history.

#### **e. Data Analysis and Reporting**

The system must provide advanced data analysis tools:

- Dynamic Views: creation of custom views correlated by keyword, period, and entity.
- Export: ability to export data using predefined templates (PDF, CSV, XLSX).
- Advanced filters: application of complex filters and saving of custom views.
- KPIs: definition and monitoring of performance indicators with executive summaries.

### **6. Security and Privacy**

The system must ensure:

- Regulatory compliance: GDPR and relevant Italian laws (Leg. Decree 196/2003, 101/2018, and updates).



- Access management: user role and permission profiling.
- Audit logs: tracking of accesses and operations.
- Encryption: data protection at rest and in transit.
- Backup and recovery: implementation of backup, restore, and disaster recovery systems.

## 7. Interoperability

The platform must interoperate with:

- EPOS systems: integration with EPOS Integrated Core Services – Central Hub and institutional tools (e.g., Google Suite).
- APIs: exposure of documented RESTful interfaces for external system integration.
- Import/export: support for data import/export to/from other systems.

## 8. Execution Methods

### - Development Planning and Management

The Provider must adopt an iterative and incremental approach, sharing with the Contracting Authority a detailed plan including:

- Activity timeline, structured by phases (analysis – month 1; design – month 2; implementation – months 3–7; testing and verification – months 8–11; training and release – month 12; maintenance and support (13–16).
- Periodic progress reports (e.g., monthly) detailing activity status, critical issues, and deviations.

The Provider must appoint a technical and a managerial contact as the single interface with the Contracting Authority.

### - Source Code and Version Control

All code must be managed using a distributed version control system (preferably Git on GitLab), with at least:

- Read-only access for the Contracting Authority.
- Structured branching model (e.g., Git Flow or trunk-based).
- Clear commit annotations and release tagging.
- Integrated issue tracking system.
- CI/CD practices for build, test, and deployment automation.

The code must be open source and follow EPOS guidelines. Changes must be coordinated with the Contracting Authority through defined procedures.

### - Development, Testing, and Production Infrastructure

The Provider must prepare and manage the environments for each software lifecycle phase:

- Development environment for internal functional testing.
- Staging environment for shared testing with the Contracting Authority.
- Production environment for final system deployment, to be hosted on a cloud provider agreed upon with the Contracting Authority.



Also required:

- Resource and application monitoring systems.
- Centralized logging tools.
- Disaster recovery procedures.

- **Application Security and Data Handling**

The Provider must ensure security by design and privacy by default in all platform components.

Specifically:

- User profile management with configurable roles and permissions.
- Use of secure protocols (HTTPS, TLS).
- Data encryption (in transit and at rest).
- Centralized, immutable audit logs.
- Logical firewalls and access segmentation.
- GDPR compliance with support for registry management, consent tracking, and breach notifications.

The Provider will collaborate with the Data Protection Officer (DPO) of the Contracting Authority to ensure documentation for compliance.

- **Technical and User Documentation**

The Provider must prepare, deliver, and maintain the following in English and open digital formats (e.g., PDF/A, DOCX, Markdown):

- Technical documentation: logical/physical architecture, software components, data flows, APIs, infrastructure requirements.
- System manual: installation, configuration, backup/restore, and update procedures.
- User manual: operational platform functions with practical examples and GUI screenshots.
- Role-specific guides: tailored to users (e.g., staff, project leads, reviewers, admins).
- Development diary and versioning: detailed changelog and release notes.

- **Staff Training**

The Provider must plan and deliver structured training for all user profiles, including:

- Theoretical-practical sessions (in-person or remote), with real/simulated environment exercises.
- Educational materials: slides, summary manuals, step-by-step guides.
- Video tutorials and recordings, accessible asynchronously.
- Storyboarded process flows for clarity.
- All materials must be approved by the Contracting Authority prior to delivery.

- **Ticketing and Issue Management System**

GitLab will be used for issue management throughout the project lifecycle. The system must:

- Allow submission and classification of requests (bug, change, feature).
- Assign issues to responsible teams/members.



- Provide up-to-date issue status.
- Generate periodic reports on issue number, status, and type.
- Be remotely accessible by the Contracting Authority.

- **Post-Delivery Technical Support**

The Provider must offer technical support and corrective/adaptive maintenance for at least four months after final acceptance.

During this period:

- Reported malfunctions will be resolved.
- Minor adjustments for operational needs will be made.
- Technical staff will receive assistance.
- System monitoring and optimization suggestions will be provided.

