

Vacancy details

Call for Applications: IT/Data Systems Engineer at EMSO ERIC (European Multidisciplinary Seafloor and Water-Column Observatory European Research Infrastructure Consortium) Central Management Office (CMO)

Contracting Authority

The European Multidisciplinary Seafloor and water column Observatory (EMSO) is a Research Infrastructure at fixed-point monitoring nodes connecting European marine research facilities: from the North Atlantic, to the Mediterranean and the Black Sea. It currently comprises 14 (fourteen) open ocean facilities including 3 (three) shallow water test sites (see www.emso.eu for details). EMSO is a European Institution set up as an ERIC (European Research Infrastructure Consortium) by decision of the European Commission (September 29, 2016). Its Members are currently States from the European Union although it is open to other external members. Additional information is available on EMSO ERIC website: www.emso.eu

EMSO ERIC is an equal-opportunity employer. As such, it does not discriminate in terms of race, age, gender, religion or sexual orientation.

Application deadline: **4th November 2024, 12:00 CET**

Estimated starting date: December 2024

Type of contract: Fixed-term employment contract or other contractual arrangements to be agreed upon.

Required effort: 18 months of full-time engagement

Compensation: to be agreed upon after the first interview round. The compensation amount will be aligned to market standards, depending on the qualifications and experience of the candidate.

The Gross remuneration will be inclusive of contributions required by Italian tax and social security regulations for the above-mentioned employment contract type. Missions allowances, authorised travel expenses, and travel subsistence costs are to be reimbursed by EMSO ERIC. In the case of candidates whose residence is not in Rome it can be agreed on a specific relocation incentive package.

Workplace: Via Antonio Giunio Resti 63, 00143 Rome, Italy.

Working Language: English.

Job Profile:

EMSO ERIC seeks a skilled IT/Data Systems Engineer, capable of developing and maintaining information systems and data platforms. The successful candidate will manage IT infrastructure and support the execution of European R&D projects.

Position responsibilities:

● **Cloud and IT Infrastructure:**

- o Deploy and manage cloud-based (OpenStack) applications and services.
- o Regularly operate and update our federated IT infrastructure (ERDDAP) to ensure data accessibility and integrity.
- o Integrate APIs and software tools into EMSO ERIC data systems.
- o Administer Virtual Research Environments

● **Innovative Web Upgrades:**

- o Develop and evolve user-friendly interfaces to enable intuitive data exploration and reporting tools (dashboards, graphs, interactive maps).
- o Implement data processing for statistical, monitoring, and quality assurance purposes;
- o Develop user login access and survey capabilities.
- o Create an access portal for accepting and managing project proposals efficiently.

● **General IT Support:**

- o Provide technical support, including system deployment, maintenance, monitoring, and performance analysis to the EMSO distant community, distributed in 8 countries in Europe.
- o Collaborate with team members and stakeholders to enhance system functionalities.

● **Technology watch**

- o Interact with EU consortia and Worldwide initiatives to implement IT technologies in EMSO regional facilities in connection with the EMSO central IT hub and to further set EMSO at the cutting edge of IT technologies
- o Contribute to funded projects for the development of the next generation of IT services, as an EMSO staff member

Required Qualifications and Competencies:

This individual will routinely interact with people of diverse backgrounds and nationalities from within and outside the EMSO ERIC organisation, so interpersonal and communication skills are necessary.

The job allows international visibility and exposure to European and international scientific bodies in marine research in a multi-cultural and stimulating professional



environment and can provide additional opportunities for the candidate's professional and technical growth.

● **Education:**

- o Master's Degree in Computer Science, Information Technology, Engineering, or Marine Science with relevant data science training.
- o Other relevant educational certificates or technical proficiency in data visualisation, information systems, and data platforms

● **Experience**

- o Candidates should have at least 4 years of experience from previous roles similar to the job object of the vacancy.

● **Technical Skills:**

- o Experience with web technologies: HTML, CSS, JavaScript, Angular, Node.js.
- o Experience with data analysis and visualisation tools (Python, MATLAB, Octave, R).
- o Proficiency in Python programming and RESTful APIs.
- o Familiarity with big data frameworks (Apache Hadoop/Spark, Kafka, Elastic, Kibana, Grafana).
- o Fluent in written and spoken English; proficiency in an additional major European language is a plus.
- o Advantageous: Familiarity with cloud technologies (AWS, OpenStack) and IT automation tools (Ansible, Terraform).
- o Advantageous: Knowledge of containerization technologies (Docker, Kubernetes).

Desirable Attributes

- Proven hands-on experience with European marine data repositories.
- Experience in interdisciplinary international projects involving ocean sciences, broader geosciences, and other scientific domains.
- Knowledge of EMSO ERIC Regional Facilities/Test Sites is an advantage.

Soft Skills

- Excellent communication and interpersonal skills.
- Capacity to develop IT projects with a consortium, including skill in federating people energy and reaching a common vision.
- Ability to work effectively both in-person and remotely.

Working Conditions:

- The position is based in Rome to collaborate with the local team
- Frequent travels in Europe to collaborate and support distant partners
- Work can be occasionally requested online during some weekends and holidays.
- Work development might occasionally fulfil deadlines with short notice.

Application Procedure



Applicants should send

- i. A cover letter describing and demonstrating the applicant's suitability for the position and how he/she can carry out the activities and deliver according to EMSO ERIC mission;
- ii. A CV along with a cover letter as a single PDF document summarising their relevant experience and expertise and motivations for wanting to join EMSO.
- iii. Names and contact information of at least two relevant references.
- iv. Applicants must declare to have a clean criminal record.

According to Italian Privacy Protection Law n. 196/03 any resume not mentioning explicitly the following wording: 'I authorise the use of my personal data in accordance with Italian Privacy Protection Law (30/06/2003, n. 196/03)' will be automatically deleted from our database and consequently not taken into consideration

When submitting the application, please use the following subject in your email:
"Application for the IT developer with Data Visualization expertise".

Any specific inquiries about this job posting should be sent to recruitment@emso-eu.org specifying the term of the sought position.

Selection procedure

EMSO ERIC selection and recruitment process is transparent and non-discriminatory. EMSO ERIC provides equal employment opportunities to all applicants. The selected candidates will be notified and invited to participate in an individual interview to be held either in person or online. In the interview, the candidate will be subjected to a test to evaluate her/his IT skills specified in the vacancy through simulation exercises to be carried out during the interview. A selection panel shall be established by EMSO ERIC and will include external experts. Upon evaluation of the applications, the selection panel will invite the candidates to an interview in person or remotely. It is expected that the selection process will be completed by November 2024 and that he/she will take up office by December 2024.

