

Notice for the collection of non-binding Expressions of Interest for inclusion in the EMSO ERIC Expert short-list

Profile 1: Expert in Strategic management of Research Infrastructures

Profile 2: Expert in the implementation and management of IT and computing infrastructures in an international landscape (2a and 2b)

Profile 3: Expert in multiparametric Time series analysis and AI

Profile 4: Experts in impact plan elaboration and impact assessment (4a and 4b)

Profile 5: Experts in user-oriented service design and deployment.

Profile 6: Expert in corporate communication for scientific outreach and shareholder awareness

EMSO, the European Multidisciplinary Seafloor and water column Observatory (EMSO) is a Research Infrastructure based on Regional Facilities distributed from the North-east Atlantic, to the Mediterranean and the Black Sea, equipped with fixed-point multisensory monitoring platforms. EMSO currently comprises 14 (fourteen) offshore platforms, including 2 (two) shallow water test sites (for details see www.emso.eu). EMSO institution was created as an ERIC (European Research Infrastructure Consortium) by the decision of the European Commission (29 September 2016). Its members are currently European Union Member States, although it is open to other external members. Further information is available on the EMSO ERIC website: www.emso.eu.

EMSO ERIC is an equal-opportunity employer. As such, EMSO ERIC does not discriminate on the basis of race, age, gender, religion or sexual orientation.

Considering that:

- i) EMSO addresses global challenges, such as climate trends, marine ecosystem preservation, and marine geo-hazards generation and mitigation,
- ii) EMSO is expected to expand its geographical area, revise its sampling and observational strategy, expand its catalogue of services to satisfy a larger community of users and stakeholders,
- iii) EMSO ERIC deems it necessary to support the infrastructure's growth with specific professional skills of short-term experts and senior advisors providing expertise for the implementation of the EMSO ERIC activities in coordination with the Director General.

Art. 1

Purpose of the Notice

For the reasons set out in the introduction, EMSO ERIC needs to select qualified Experts to strengthen its capacity to implement the measures envisaged in the Strategic Plan, to monitor their realisation and evaluate their results and to promote the participation of EMSO ERIC in R&D programs and to ensure its sustainability in the medium to long term.

To this end, with this Notice, we intend to collect Expressions of Interest from Experts with scientific or technological expertise in the disciplines of marine environmental science and technology and in the strategic management of an ERIC.

The expertise in marine sciences covers a wide range of disciplinary areas including for instance, and not limited to, biology and biodiversity, geology and geophysics, bio-chemistry,

hydrology and physical oceanography. Engineering skills in data science, AI applied to time series analysis, cloud computing, and user-oriented service design and deployment are expected. Socio-economic expertise to make EMSO ERIC as a key actor in the Blue Economy and able to design and implement an impacting strategy plan are welcome. Particular attention will also be dedicated to expertise in strategic management related to research infrastructure.

Art. 2

Required profiles

The sought profiles are detailed in ANNEX 1:

1. Profile 1: Expert in Strategic management of research infrastructure
2. Profile 2: Expert in the implementation and management of IT and computing infrastructures dedicated to the management and analysis of scientific data in an international landscape
 - a. Profile 2a: Expert in IT procedures, and process management of the EMSO ERIC scientific activities.
 - b. Profile 2b: Expert in the management of qualified and controlled marine data flow
3. Profile 3: Expert in multi-parameter time series analysis and AI.
4. Profile 4: Experts in impact plan elaboration and impact assessment
 - a. 4a Experts to assess impacts of EMSO research and development activities
 - b. 4b Experts in Blue Economy to elaborate the future socio-economy impact plan and implement it.
5. Profile 5: Experts in user-oriented service design and deployment
6. Profile 6: Expert in corporate communication for scientific outreach and shareholder awareness.

Art. 3

How to submit applications

1. EMSO ERIC experts' selection process is transparent and non-discriminatory. EMSO ERIC provides equal opportunities to all applicants.
2. Each candidate can apply for more than one Profile.
3. Applications should include:
 - a) An expression of interest letter describing the applicant's suitability for the profile(s) highlighting the competencies that she/he possesses to carry out the activities and to

deliver according to the EMSO ERIC mission. The Expression of Interest must be duly sent signed and accompanied by a copy of a valid identity document.

- b) The Curriculum Vitae of the applicant. The Expression of Interest must be accompanied, under penalty of exclusion, by a curriculum vitae prepared in the European format and duly signed, in which it is necessary to detail each element suitable for verifying both the requirements and the skills referred to in Article 4 of this Notice.
4. The expression of interest should be addressed to the EMSO ERIC Director General and submitted by email to recruitment@emso-eu.org. The deadline for expressing interest for this first call is May 18th, 2025.
5. A selection panel shall be established by EMSO ERIC including external experts. Upon evaluation of the applications, the DG shall notify the experts regarding their appointment.
6. EMSO ERIC reserves the right to carry out appropriate checks on the veracity of any substitute declarations contained in the Expression of Interest and in the curriculum.

Art. 4

Requirements for participation

1. Each candidate must possess the following general requirements:
 - a) not having received criminal convictions and not being the recipient of judicial orders registered in the criminal record. The causes of exclusion referred to in this number also apply in the case in which the final sentence provides for the application of the penalty upon request, pursuant to art. 444 of the Code of Criminal Procedure of Integrity under the Italian legislation.
 - b) not having been convicted in accounting and administrative liability proceedings for damage to the treasury.
 - c) not having been subjected in the last three years to disciplinary proceedings that have concluded with a definitive provision imposing a sanction and not having any disciplinary proceedings in progress.
 - d) have knowledge of the English language (specify the CEFR level, whether A1, A2, B1, B2, C1, or C2) at level C2.
 - e) to be in possession of a master's degree or equivalent and any specialization qualifications in the areas of sectoral competence of EMSO ERIC referred to in art. 1 and have proven professional relevant experience of at least ten years.

- f) to have met the participation requirements by the expiry date of the deadline established for submitting the application and to maintain the requirements for the entire duration of the collaboration.
 - g) Possession of the requirements may be ascertained during the selection procedure and the lack of the requirements will result in the exclusion of the applicant from the selection procedure itself, and will constitute grounds for termination of the contract, if already stipulated.
2. Each candidate must possess the technical experience requirements indicated in ANNEX 1.

Art. 5

Reasons for preventing participation

Except for further cases of prohibition of appointment and incompatibility indicated by the Italian legislation in force, those who:

- a) find themselves, with respect to EMSO ERIC or its affiliates and members, in a situation of conflict, even potential, of interests of their own, their spouse, cohabitants, relatives, or in-laws within the second degree.
- b) are in one of the conditions of incompatibility or ineligibility provided for by the Italian legislation in force and by Legislative Decree 39/2013, Legislative Decree 165/2001, and Legislative Decree 175/2016, undertaking from now on to remove any causes of incompatibility following the selection process.

Art. 6

Evaluation of applications

1. The Director General of EMSO ERIC will proceed with the evaluation of the applications with the support of a selection panel.
2. The evaluation of the outstanding applications on the short list will be carried out at least twice a year.
3. The evaluation will consist of an initial formal admissibility check of the applications followed by a subsequent evaluation, through the examination of the documentation presented and the carrying out of an interview, in case of assignment of an expertise task,

of the following elements:

- Relevance of experiences;
 - Quality of experiences;
 - Number of experiences.
4. Through this evaluation, a ranking will be determined for each Expert Profile, which will be approved by decision of the Director General.
 5. The short list will be updated every six months.

Art. 7

Object of the Experts' activity

The selected Experts will be required to carry out the activities mentioned in Art.2 and possess the competencies illustrated in Annex 1, which will be further detailed in the collaboration contracts.

Art. 8

Assignment of tasks

1. Inclusion in the short-list does not imply the assignment of a contract neither an extension of the first assignment nor any right to be assigned a specific expertise task.
2. In particular, the task for the experts will be assigned as the needs arise and EMSO ERIC will carry out the selection based on the respective skills and experience of the shortlisted experts.
3. Therefore, any temporary collaboration will be assigned, based on the ranking, by the DG through the stipulation of a contract that will regulate the duration, the tasks to be performed, the obligations of the Expert and the expected compensation on a case-by-case basis.
4. The assignment will consist of a self-employed work performance, without subordination or exclusivity, governed by articles no. 2222, et seq., and no. 2229, et seq., of the Civil Code of the Italian Legislation.
5. For the performance of the tasks for the Experts, a gross compensation will be recognized based on experience and competence and, in any case, not exceeding 700 euros/day of work, in addition to applicable VAT to the fees and to mission expenses documented at

the bottom of the expenses list.

6. In any case, the compensation will not be higher than that provided for direct assignments of services by Italian Legislative Decree 18 April 2016, n. 50, currently in force, and by Legislative Decree 31 March 2023, n. 36, where applicable.

Art. 9

Person responsible for the procedure

The person responsible for the procedure is the Director General of EMSO ERIC.

Art. 10

Information on the processing of personal data

1. EMSO ERIC is the Data Controller, pursuant to and for the purposes of EU Regulation 2016/679 hereinafter 'GDPR'. The personal data provided by candidates will be processed in accordance with the provisions of Legislative Decree 30 June 2003, n. 196, and Regulation (EU) 2016/679 (General Data Protection Regulation).
2. The candidate has the right to obtain from the owner the cancellation (right to be forgotten), limitation, updating, rectification, portability, opposition to the processing of personal data concerning him, as well as in general can exercise all the rights provided for by articles 15, 16, 17, 18, 19, 20, 21, 22 of the GDPR.

The extended and updated information is available on the website emso.eu.

Art. 11

Final provision

1. This Notice will be published in full on the EMSO website (www.emso.eu).
2. EMSO ERIC reserves the right to extend, suspend, revoke, or modify this Notice in whole or in part for justified reasons.

ANNEX 1

DESCRIPTION OF THE SEARCHED PROFILES

Profile 1: Expert in Strategic management of Research Infrastructures

Skills in the formulation of strategies, implementation of research management processes, management of scientific collaboration of Research Infrastructures at national/international level, R&D Project execution. He/she will contribute to (i) manage the key aspects of the EMSO strategic plan, (ii) implement strategies and performance metrics related to the achievement of the objectives of EMSO ERIC Strategic Plan.

Required experience

Demonstrated experience in R&D Project execution, management, and collaboration on R&D Infrastructures at national/international level and in organising frameworks and commanding processes including planning and managing the different phases of R&D projects. In addition, the Expert competencies include the planning, prioritization and supervision of the different operations and tasks to be carried out to complete the project within the agreed deadlines and budgets, optimizing to the maximum issues such as resource management or project costs.

Profile 2: Expert in implementation and management of IT and computing infrastructures dedicated to the management and analysis of scientific data in an international landscape

Profile 2a: Expert in IT procedures, process management in implementation of the EMSO ERIC scientific activities.

Required technical experience

Demonstrated experience in IT Infrastructure in the research world at national and international levels and consulting experience encompassing various aspects of IT infrastructure management as: (i) network Management and security (setup, maintenance, and optimization of network systems), (ii) server, cloud services and data centre management, (iii) Security and disaster recovery management. In addition, it is desirable that the expert demonstrates experience in leading and managing an IT team, fostering collaboration across diverse and separate organisational units to ensure IT solutions align with the implementation needs of the activities planned for the ERIC technological implementation of the scientific activities

Profile 2b: Expert in the management of qualified and controlled marine data flow

Required technical experience

Demonstrated knowledge and experience in the implementation of standards and protocols to be applied to increase the standardisation and the compliance of EMSO data with FAIR principles. We want the EMSO data to be more interoperable with EU and worldwide data flows and to elaborate on specific big data flows (acoustics and images).

Profile 3: Expert in multi-parametric Time series analysis and AI

EMSO ERIC activities involve the use of time series, through the chronological sequence of observations on one or multiple variables of interest. The expert is required to possess a deep knowledge of Univariate & Multivariate Time Series analysis methods and in the use of dedicated analysis models. Experience in the deployment of Artificial Intelligence (AI), is expected to be further needed since it will be necessary to build strong models that can handle many predictors with non-linear inter-dependencies, for the sake of accurate predictions.

Required technical experience

Demonstrated experience in signal processing analysis dedicated to multivariate time series and non-stationary processes, statistical methods and modelling in AI models, adept at uncovering hidden relationships in the data, such as seasonal variations, recurring patterns, and subtle correlations, architectures of recurrent neural networks (RNNs) and long short-term memory (LSTM) networks, to recognize intricate patterns in time series data and in AI models dynamically generated from the data, discovering hidden relationships between variables, and leading to more precise forecasting.

Profile 4: Experts in impact plan elaboration and impact assessment

Profile 4a: Experts to assess impacts of EMSO research and development activities

The evaluation of users and socio-economic impacts of environmental R&D is required (i) to justify and optimize EMSO ERIC objectives and strategies with EMSO ERIC stakeholders' needs and expectations. The expert will advise on how to demonstrate the relevance and usefulness of EMSO ERIC outputs and outcomes and (ii) to enhance EMSO ERIC R&D quality and credibility, by providing evidence of R&D achievements and contributions to European industry and society. The needed expertise is including both the elaboration of the impact plan and the assessment guidance.

Required technical experience

The experts are required to demonstrate experience in evaluating the R&D challenges and their impact, involving R&D structures, fostering the establishment of a cooperative working relationship (among universities, laboratories, industry). The experts' technical experience should be focused in setting requirements for carrying out impact assessments, interim evaluations, ex-post evaluations and regular monitoring of research and development activities and the main research and innovation challenges in Europe.

Profile 4b: Experts in Blue Economy to elaborate on the future socio-economy impact plan and implement it.

We are seeking highly qualified Blue Economy experts to develop and implement a future socioeconomic impact plan aimed at achieving environmental, social, and economic benefits through sustainable ocean-based activities. Selected experts will play a key role in shaping strategies that promote sustainable development while safeguarding marine ecosystems.

The experts will

- i) design and implement comprehensive plans to maximize environmental, social, and economic benefits preserving EMSO scientific objectives;
- ii) support the impact of EMSO on the sustainable growth of the Blue Economy by developing actionable socioeconomic impact plans;
- iii) identify and analyse key aspects of the marine legislations and regulations that support impacts of EMSO a) on sustainable Blue Economy growth and b) on the application of EU directives related to the marine environment, both acting at national, regional, and international levels

Required technical experience

Experts should demonstrate proven experience in developing and executing socioeconomic impact assessments for marine/environment-related RIs with an extensive knowledge of the Blue Economy, including its environmental, social, and economic dimensions in relation with EU RIs.

Familiarity with global and regional marine policies and frameworks, including regulations on marine waters and seabed usage (preferred).

Profile 5: Experts in user-oriented service design and deployment.

The expert will provide relevant contributions to the service design in Research infrastructures and – notably - of EMSO ERIC services. The expert will be asked to master process design, organizational design, information design and technology design, matching them with the demand for the services and the ability of EMSO ERIC to deliver that service, based on industry needs.

Required technical experience

The expert is expected to have a wide knowledge of the general principles of service and process design, and to propose sustainable solutions and optimal user experiences in the R&D context. Service designer competencies should allow the expert to formulate new service concepts, break the RI services into sections and adapt fine-tuned solutions to suit EMSO ERIC stakeholders' and end-users' needs in the relevant technology context in which EMSO ERIC operates.

Profile 6: Expert in corporate communication for scientific outreach and shareholder awareness

The expert will provide advice and guidance to improve the EMSO communication strategy and its implementation with innovative ideas and tools.

Required technical experience

The expert should have a strong scientific background to aid in reading, interpreting and communicating scientific papers, and should possess writing experience of high quality regulatory and publication documents that meet international standards of written English.