

Support Letter For the Portuguese EMSO node and its Iberian Regional Facility

Corporate Headquarters: EMSO ERIC

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> To: Carlos A. Mendes S. de Sousa Instituto Português do Mar e Atmosfera, I.P. (IPMA) Divisão de Geologia e Georrecursos Marinhos Estação Experimental de Moluscicultura de Tavira Vale Caranguejo s/n 8800-737 Tavira

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Dear Sir/Madam,

As Director General of the European Research Infrastructure Consortium EMSO, the European Multidisciplinary Seafloor and water column Observatory (EMSO ERIC), I wish to formally express my support to the Portuguese Institute for Sea and Atmosphere, I. P. (IPMA, IP).

About EMSO ERIC

EMSO ERIC is a pan-European Research Infrastructure consisting of eight Member States of the European Union—Italy, Spain, Portugal, France, Ireland, Norway, Greece, and Romania. EMSO ERIC was established under the European legal framework of the European Research Infrastructure Consortium (ERIC), governed by European Council Regulation (EC) No. 723/2009.

Our mission is to coordinate and facilitate observations and research carried out by various research institutes operating observing facilities across key regional sites in European deep seas. These range from the Norwegian Sea to the Iberian margin and from the Atlantic Ocean through the Mediterranean and into the Black Sea.

With 14 regional observatories, of which the EMSO Iberian Margin Regional Facility, equipped with advanced multi-sensor systems, EMSO ERIC provides essential data and services to a wide spectrum of users, including scientists, industry stakeholders, institutions, and policymakers. Our work addresses critical global challenges, such as monitoring climate change trends, preserving marine ecosystems, and mitigating marine geohazards.





The continuous, multidisciplinary time-series data acquired by EMSO ERIC enable the study of diverse processes impacting the ocean, from episodic extreme events to gradual trends often obscured by short-term variability. These data are harmonised to flow in a interoperable way to the EU data aggregators such as EMODNET, SeaDataNet and Blue Cloud, and feed the European Marince Core Services of Copernicus.

Contribution of Iberian EMSO Regional Facility to the EMSO ERIC strategy and objectives at EU level

EMSO ERIC is dedicated to advancing the understanding of seafloor and water column processes in critical deep ocean regions, particularly in the context of global change. Our focus includes the long-term observation and analysis of Essential Ocean Variables, alongside other physical, chemical, and biological parameters collected by our deep-sea observatories.

In that context, the two sub-systems of the Iberian Margin Regional Facility deployed in the proximity of Cape St. Vincent (IbMa-CSV to measure Essential Ocean Variables (CTD, dissolved oxygen, turbidity, total chlorophyll-a, CDOM, PAR, currents) at different depth ranges are essential to EMSO and at EU level. They provide information on the physical and biogeochemical characteristics of the Iberian Margin waters and their variability in a wide range of timescales to understand and predict the ecosystem functioning in global change scenarios.

This is fully in line with the EMSO scientific thematic and with the EU priority of the Green Deal. In addition it is serving our community of users to establish references for model validation, to feed models with near real time data, and improve model parametrizations towards better forecasting. The resulting long-term oceanographic time series are part of the the scientific patrimony and legacy for future marine research and management for which EMSO is so engaged

Currently, EMSO ERIC is refining its strategic approach to enhance its regional impact and address environmental marine variability at (sub-)regional scales. Our vision is as a world-class Marine Research Infrastructure, providing high-quality data on the dynamics of fixed deep-ocean regions. These efforts aim to address global ocean environmental challenges affecting the Earth system and societal welfare.

In the face of the considerations above, this is why as Director General of EMSO ERIC, I am convinced of the crucial importance of the Iberian EMSO Regional Facility in the EMSO Portuguese node to achieve the EMSO vision and objectives.

I fully support the Portuguese Node with its Iberian EMSO Regional Facility and the engaged insitutions in any application that could support and sustain their activity .

Sincerely,

PhD. Ingrid Puillat

Director General, EMSO ERIC European Multidisciplinary Seafloor and water column Observatory European Research Infrastructure Consortium

