



GOVERNO  
DOS AÇORES



UNIÃO EUROPEIA

Fundo Europeu de  
Desenvolvimento Regional

**DESIGNAÇÃO DO PROJETO:** Exploring pristine deep-sea walls to establish baselines for Good Environmental Status in the Azores (DeepWalls)

**CÓDIGO DO PROJETO:** AÇORES-01-0145-FEDER-000124

**OBJETIVO PRINCIPAL:** Increase scientific production of quality and oriented towards intelligent specialization.

**ENTIDADE BENEFICIÁRIA:** IMAR (Instituto do mar)

**CUSTO TOTAL ELEGÍVEL:** 179 821,60€

**APOIO FINANCEIRO DA UNIÃO EUROPEIA:** 152 848,36€

**DESCRIÇÃO:** Deep-sea vertical walls have rarely been surveyed due to technical challenges they pose to the operation of remotely operated vehicles (ROVs) from surface vessels. DeepWalls will take advantage of the collaboration with the Rebikoff-Niggeler Foundation (FRN) and the use of their submersible Lula1000 to (1) map and document the occurrence of Vulnerable Marine Ecosystems (VMEs) associated with deep-sea vertical walls in the Azores and (2) to estimate baseline conditions in the context of Good Environmental Status of the Marine Strategy Framework Directive (MSFD) European Union. The project is composed by 3 Work-packages with the specific objectives of: 1) Build a database on archived video material on deep-sea biological communities in the Azores (WP1); 2) Develop standard survey methodologies for the mapping of biological communities in vertical walls with the submersible Lula1000 that could be applied in current and future projects (WP2); 3) Characterize and map the distribution of megafaunal communities associated with vertical walls in terms of species composition, diversity, abundance and size structure based on and new submersible dives and existing video material from FRN exploratory dives (WP2); 4) Determine the state of communities in vertical walls by applying indicators of GES as developed for the deep-sea in general and the Azores in particular as part of the MSFD (WP3).

**RESULTADOS:** DeepWalls will produce new knowledge on the status of Azores deep marine ecosystems to support better monitoring, forecasting and the establishment of ecosystem approach and adaptive management frameworks. DeepWalls directly contributes to the RIS3 Açores strategic priority of “Reinforcement of the positioning of the Azores as an intercontinental platform in the area of knowledge about the oceans” (MAR1 within priority thematic area Fisheries and Oceans). Further, by generating new knowledge on deep-sea species and communities and suggesting baseline conditions in the context of GES described in the MSFD, it contributes to other areas of intervention within the RIS3 Azores framework namely: biodiversity and sustainability of marine resources; improve knowledge on open-ocean and deep-sea ecosystems; assessment, monitoring and conservation of marine ecosystems; mapping and monitoring marine natural resources and habitats. Finally, DeepWalls will improve our knowledge of VMEs and support the implementation of international agreements to conserve VMEs and Ecologically or Biologically Sensitive Areas (EBSAs). The outputs and outcomes of the DeepWalls will have a direct impact on protecting the Azores marine environment by filling important gaps in knowledge to enable effective planning for and regulation of Blue Growth activities.