

Portuguese National Oceanographic Data Centre

A way to implement FAIR and CARE principles in national marine data

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NODC-PT

The Portuguese National Oceanographic Data Centre (NODC-PT) is a node of the International Oceanographic Data and Information Exchange (IODE) program, a collaborative effort to preserve and reuse ocean data, which are often irreplaceable and unique. NODC-PT will provide the Community of Portuguese Marine Data Providers with an effective national oceanographic management system, by compiling and facilitating the access to existing marine data. Starting in November 2022, the two national research laboratories dedicated to sea research – the Portuguese Hydrographic Institute (IH) and the Portuguese Institute for Sea and Atmosphere, I.P. (IPMA), supported by the Portuguese Committee for Intergovernmental Oceanographic Commission, agreed on a joint effort to implement the Portuguese NODC.

GOALS AND FUNCTION

NODC-PT will foster the “**collect once, use many times**” principle and will make use of the existing stakeholders’ databases to provide a web interface with open access, grouped in the following disciplines:

- ✓ Bathymetry
- ✓ Biology
- ✓ Geology
- ✓ Chemistry
- ✓ Physics
- ✓ Seabed habitats
- ✓ Marine Meteorology
- ✓ Marine Pollution



NODC-PT will adopt a federated model with data providers linked by standard metadata and data services, based on a common data policy and following the **Findable, Accessible, Interoperable and Reusable** principles. It will follow the IOC/IODE data policy, a common set of workflows, common standards and vocabularies, and a data quality framework.

It will function as a **Marine Spatial Data Infrastructure (MSDI)** encapsulating the relevant base collection of technologies, policies, and institutional arrangements that facilitate the availability of, and access to spatial data, as defined by the Spatial Data Infrastructure Cookbook.

NATIONAL MSDIs

The **Hidrográfico+** MSDI from IH has been active since 2020, providing access to hydrographic information collected and maintained in IH repositories. H+ was designed with a service-oriented architecture to provide data services for multiple users and usages - <https://geomar.hidrografico.pt>

IPMA is developing a marine spatial data infrastructure for the acquisition, aggregation and availability of oceanographic data in order to enhance research, monitoring and data dissemination of the Atlantic Ocean - the “**We are Atlantic**” data platform.



ROADMAP

Following the development of the central catalogue, and the certification as a NODC process, NODC-PT will focus on increasing the network of data providers and ocean data users, by bringing new members and stakeholders to the NODC-PT community.

Ultimately, NODC-PT will promote a national-level active community of marine data managers and scientists, all working together to improve human knowledge by sharing marine data.

Visit NODC-PT at: <https://nodc-portugal.pt/>

