



MSDIWG13

**13th Meeting of the IHO
Marine Spatial Data Infrastructures Working Group**

Portugal – Hydrographic Institute

LCDR Telmo Dias

Hybrid, Singapore, May, 9th 2022



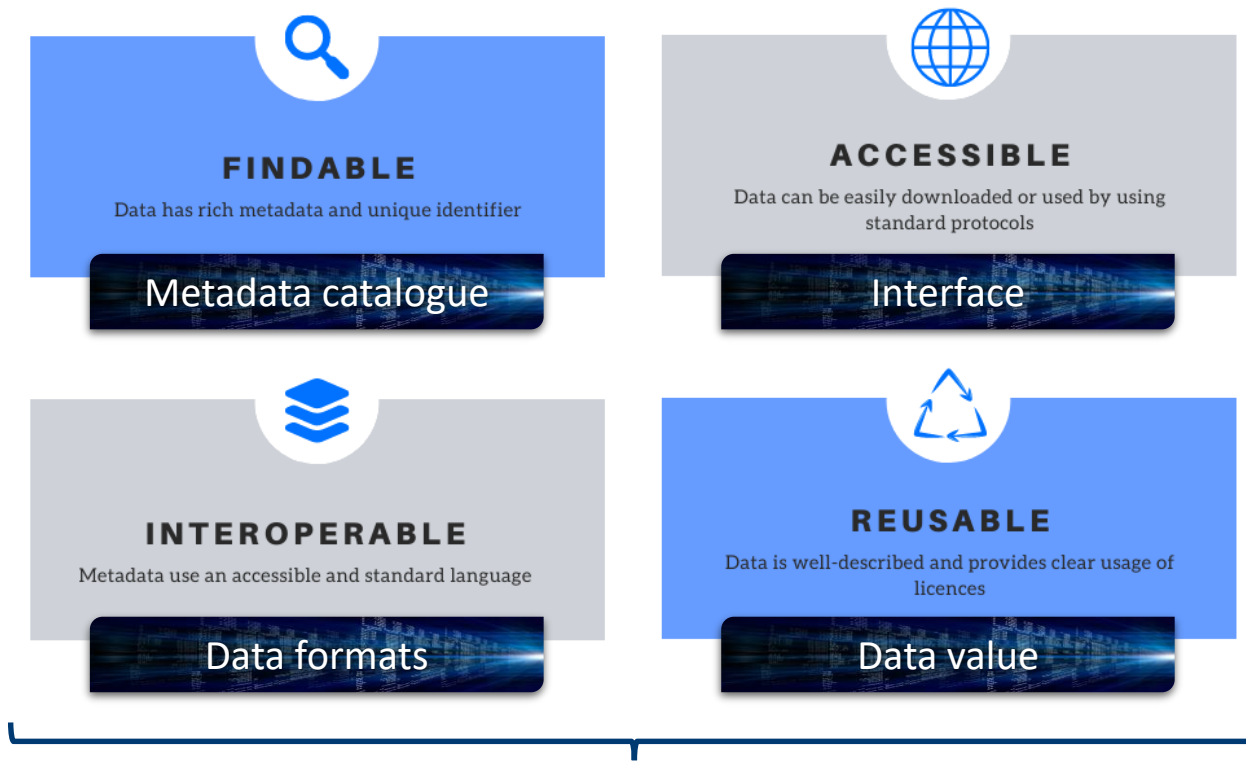
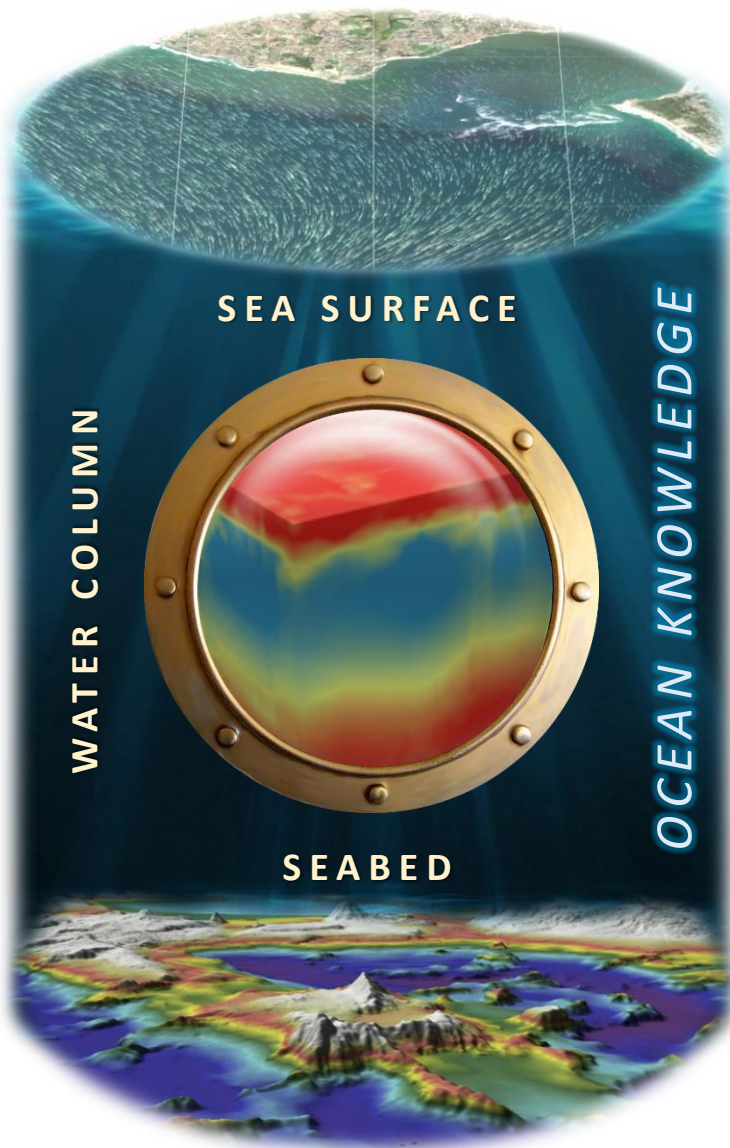
IHO

1. PORTUGUESE HYDROGRAPHIC INSTITUTE

1.1. VISION

International Hydrographic Organization

hidrográfico





IHO

1. PORTUGUESE HYDROGRAPHIC INSTITUTE

1.2. MISSION

International Hydrographic Organization

Increase the use of hydrographic data for the benefit of society



Multiple formats



One data source



Multiple formats



Extended use



IHO

1. PORTUGUESE HYDROGRAPHIC INSTITUTE

1.3. HIDROGRAFICO PLUS MSDI

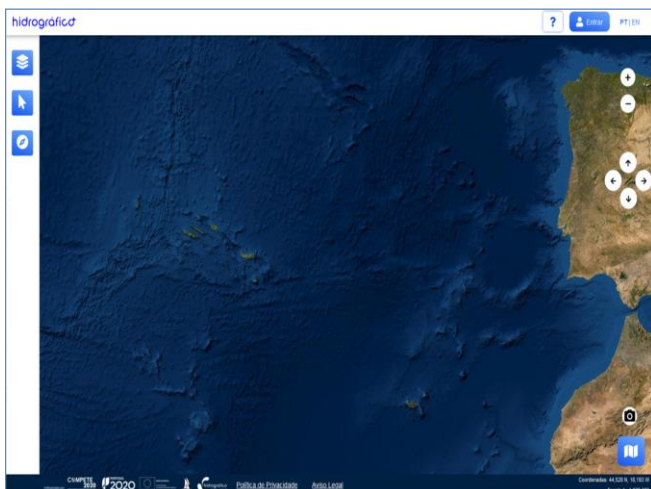
International Hydrographic Organization

hidrográfico



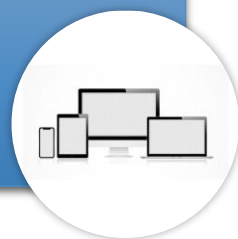
UNIÃO EUROPEIA

Fundo Europeu de Desenvolvimento Regional

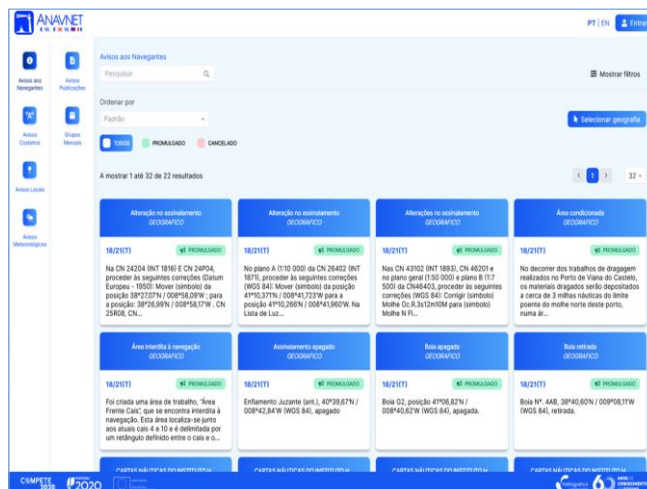


GeoPortal H+

Data download
OGC Services
API

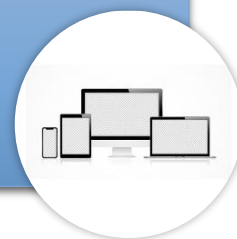


<https://geomar.hidrografico.pt>

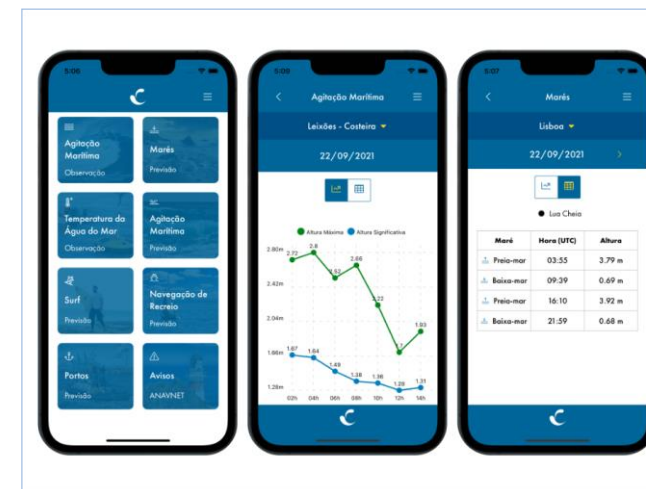


AnavNet

Notices to Mariners
Navigational Warnings
Weather Warnings

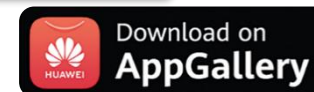


<https://geonavnet.hidrografico.pt>



App H+

Tide / Sea State
Seawater Temperature
AnavNet





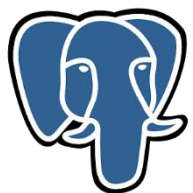
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1. PORTUGUESE HYDROGRAPHIC INSTITUTE

1.4. ARCHITECTURE

International Hydrographic Organization

Databases



PostgreSQL

Analytics

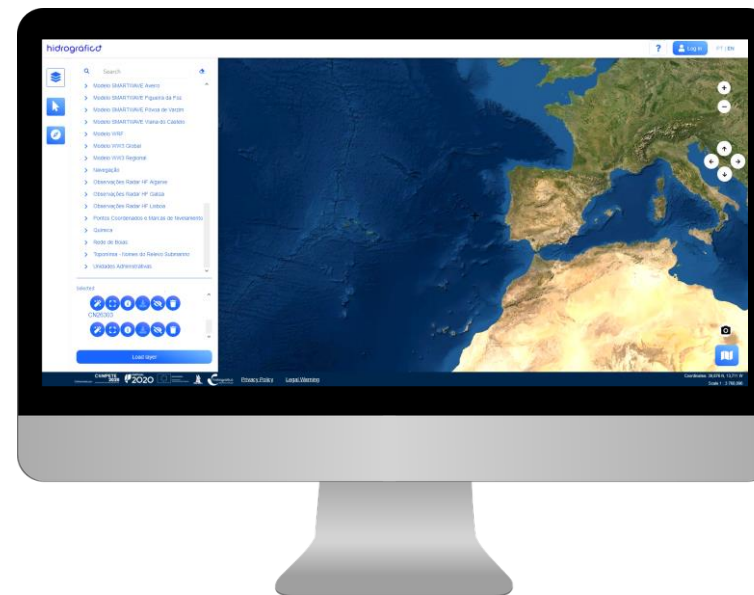


Geoservers



- Web Map Service
- Web Feature Service
- Web Coverage Service
- Web Map Tile Service

Webportal



Helpdesk



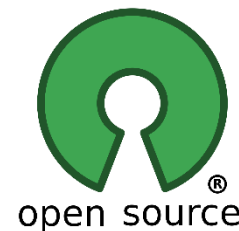
Data catalogue



User management



AGÊNCIA PARA A MODERNIZAÇÃO ADMINISTRATIVA
PRESIDÊNCIA DO CONSELHO DE MINISTROS



INTEROPERABILITY
MODULARITY
SCALABILITY

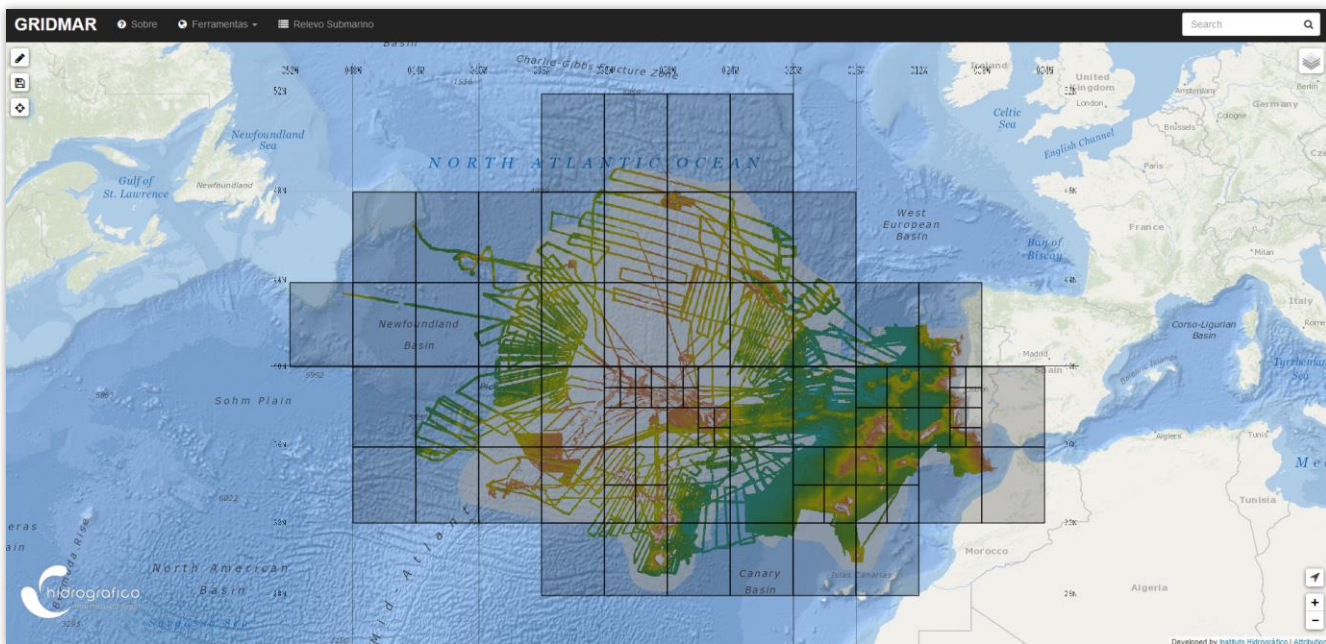


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1.5. CURRENT AND FUTURE DEVELOPMENTS

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RESOLUTION(S)

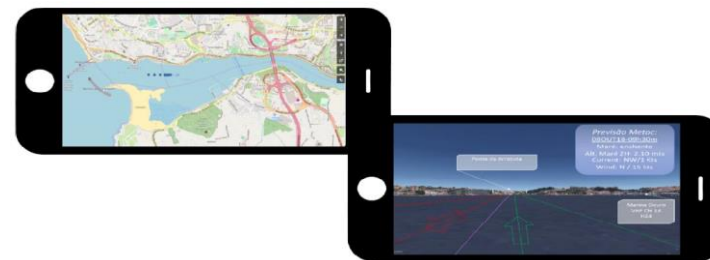
- Depth 50m-250m – Res. 32m
- Depth 250m-1000m – Res. 64m
- Depth 1000m-2000m – Res. 128m
- Depth 2000m-4000m – Res. 256m
- Depth +4000m – Res. 512m

<https://gridmar.hidrografico.pt>

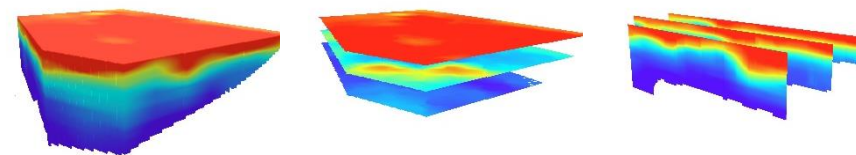
➔ WMS ENC Server



➔ Augmented reality (digital sailing directions)



➔ 3D interpolation (ocean variables)



➔ Improved visualisation (3D / 4D / split screen)

