23rd Conference of the Meso American- Caribbean Sea Hydrographic Commission

Progress on DHN Marine Spatial Data Infrastructure (IDEM-DHN)

Directorate of Hydrography and Navigation

Brazilian Navy

Context

- The potential of Marine Spatial Information
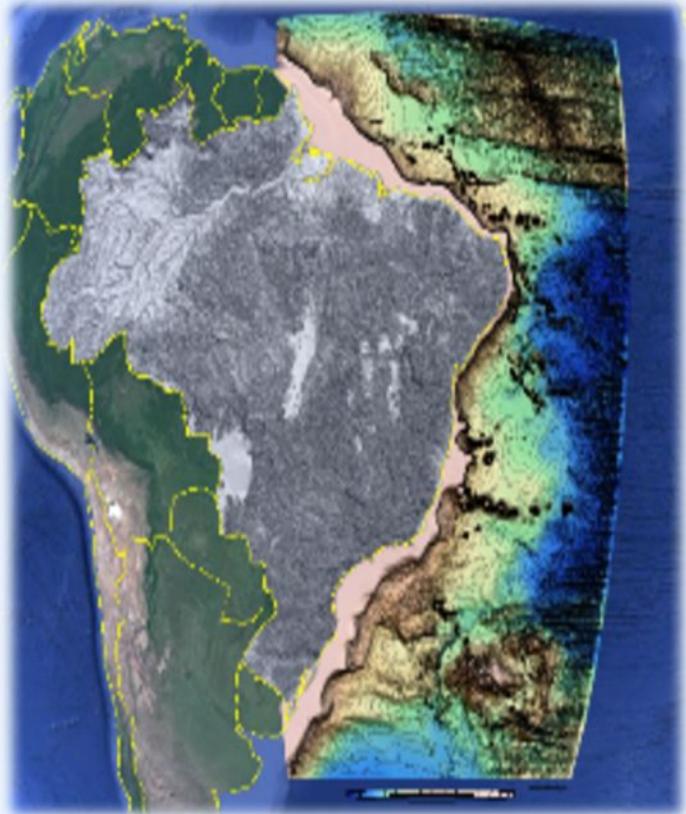
- New Technologies and Goals => SDG;

- Relationship between Nature and Society;

- **The dynamic of decisions** (*"Smart Oceans..."*)

What's the best way to managing all of it?

Return of Investments (ROI)
(*"Griffin et.al,2017"*)

Solutions based on SDI & MSDI concept

(*"C-17"*)
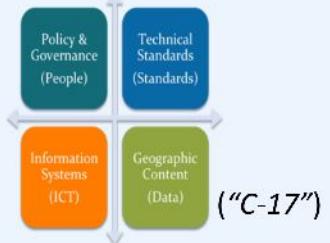
Main actions on DHN-MSDI

- Policy & Governance + Geographic content – Historical Request

("NAD-DHN, 2018")

("ISO9001:2015")

**NAD-DHN <=> n° of requests for spatial data and information increased since 2016**
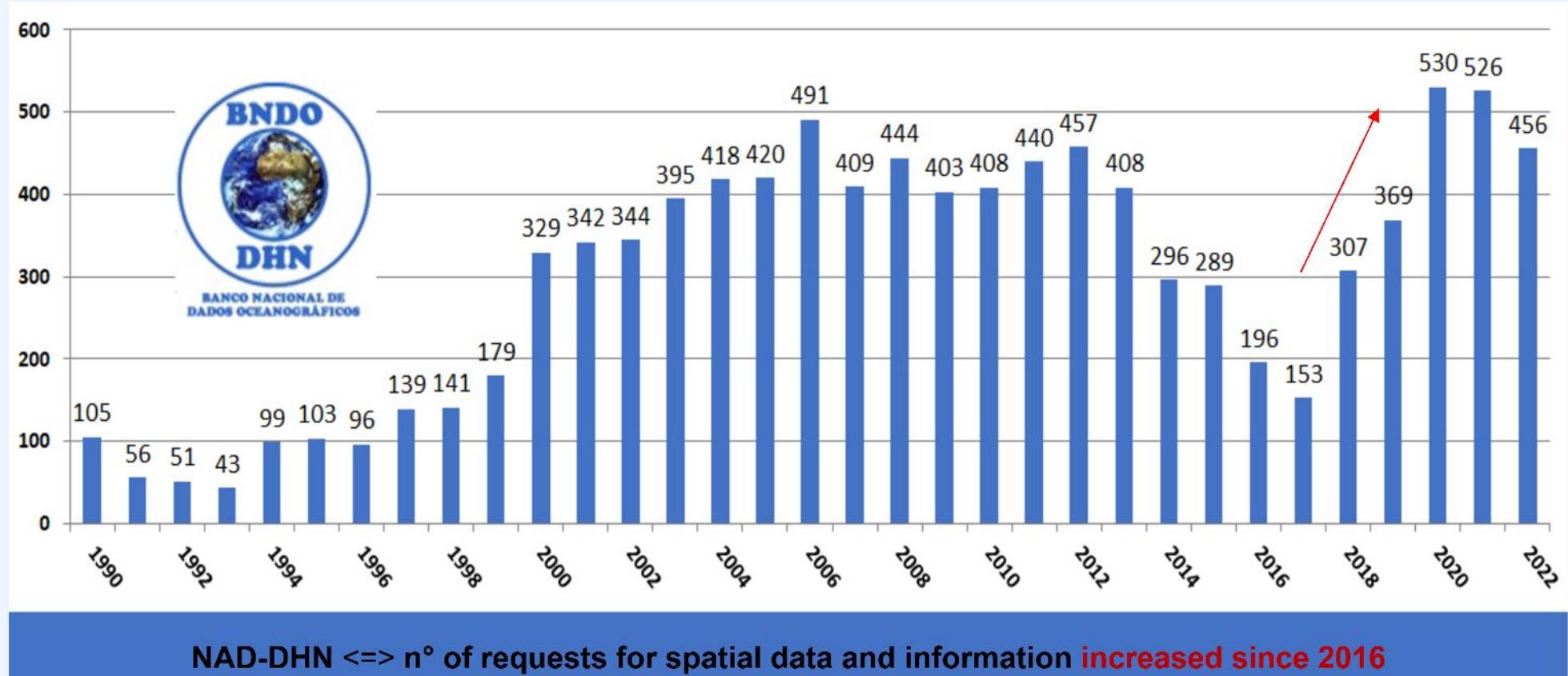
Main actions on DHN-MSDI

- Policy & Governance + Geographic content - Percentage of Clients Categories
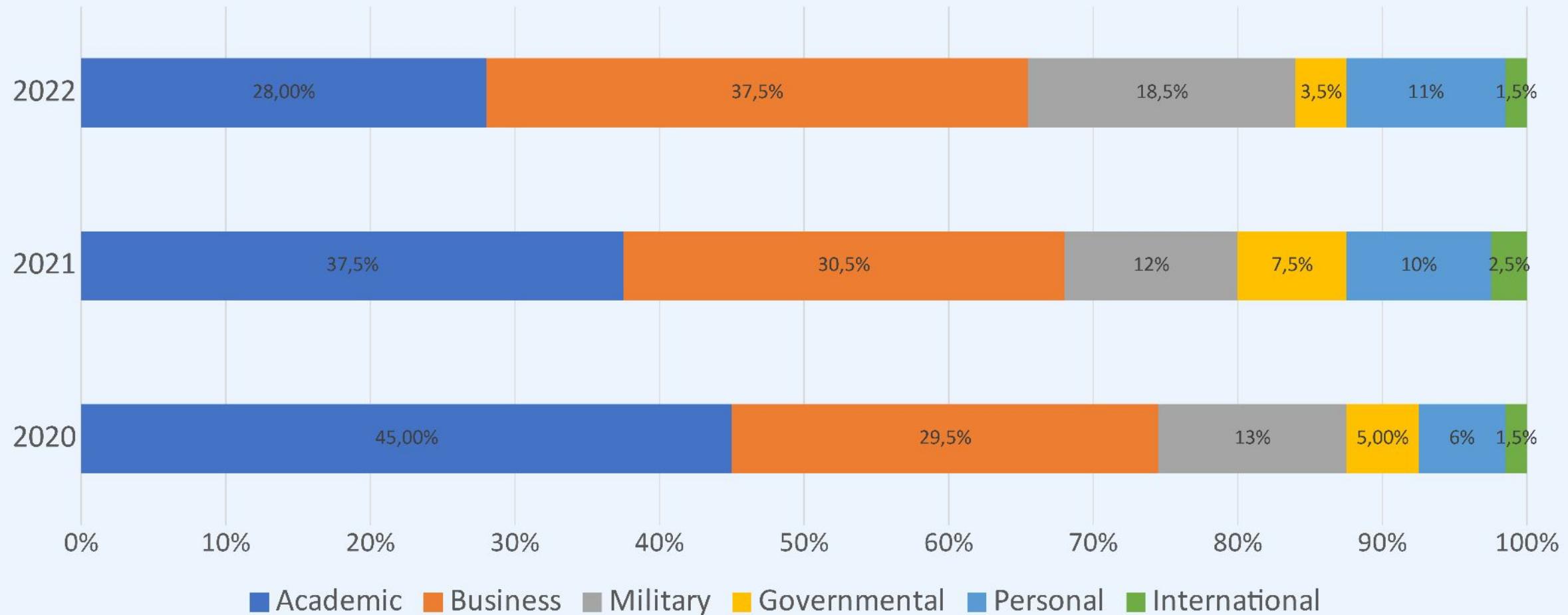
Year	Academic	Business	Military	Governmental	Personal	International
2022	28,00%	37,5%	18,5%	3,5%	11%	1,5%
2021	37,5%	30,5%	12%	7,5%	10%	2,5%
2020	45,00%	29,5%	13%	5,00%	6%	1,5%

■ Academic ■ Business ■ Military ■ Governmental ■ Personal ■ International

Main actions on DHN-MSDI

- Policy & Governance + Geographic content - Percentage of Data Type Exchange
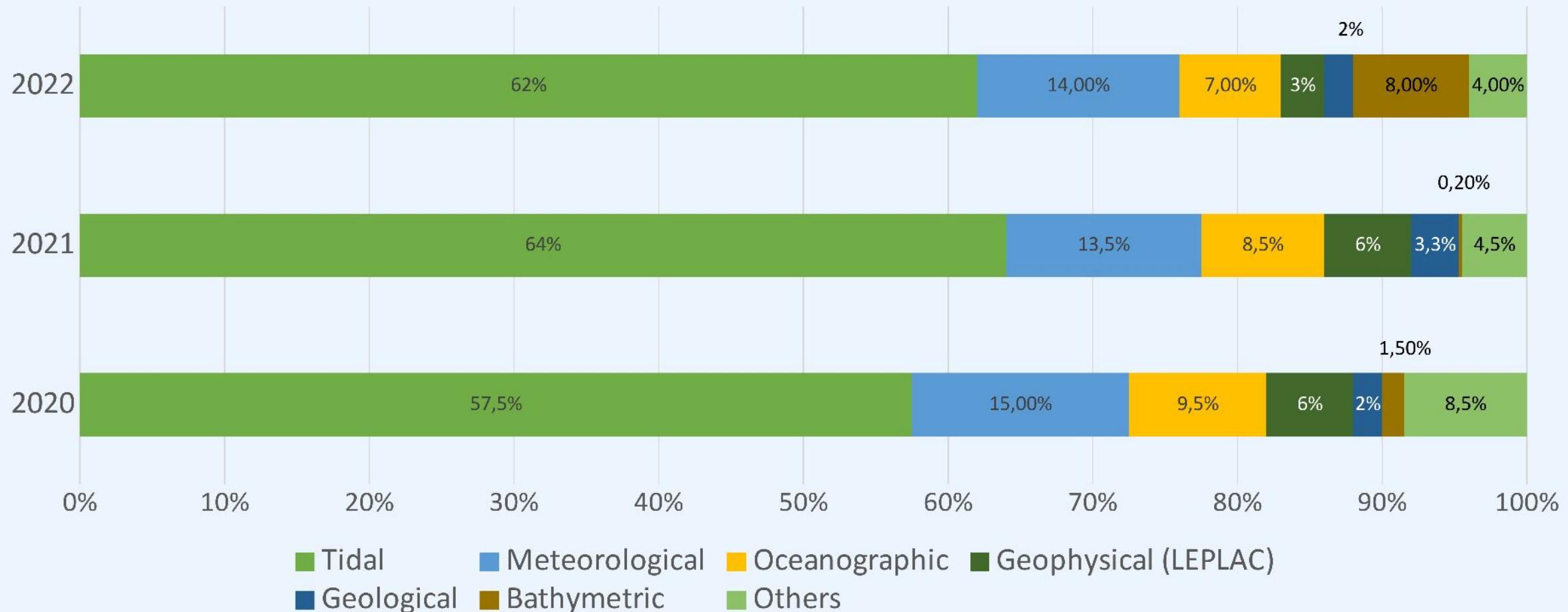
Legend:
- Tidal
- Meteorological
- Oceanographic
- Geophysical (LEPLAC)
- Geological
- Bathymetric
- Others

Geonetwork update (Metadata catalog)
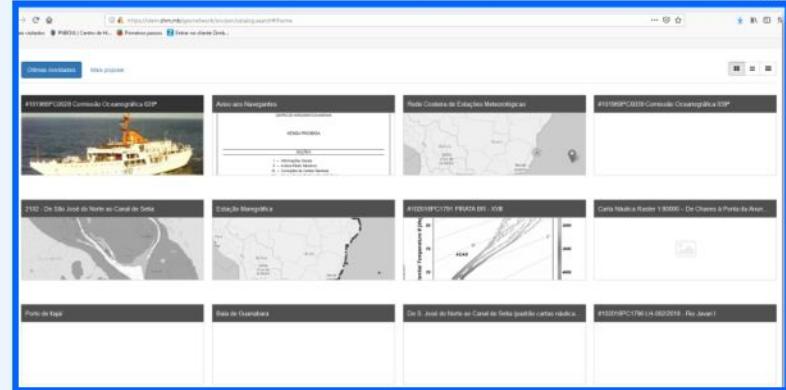
Geonetwork and Geoserver were homologated by Brazilian Navy

... **However**, in the meantime, we were using **Geonetwork Maps API** and **NSDI viewer**

Geoportal was initially plan to 2020/2021
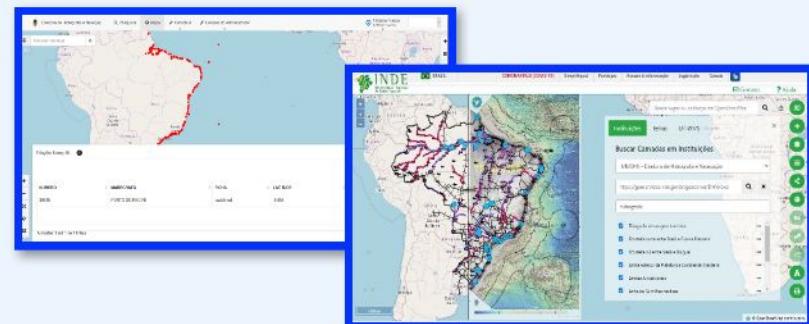
Geoportal was homologated and launch 2022

~ 2016

Geoserver (Geoservice application)

https://idem.dhn.mar.mil.br/
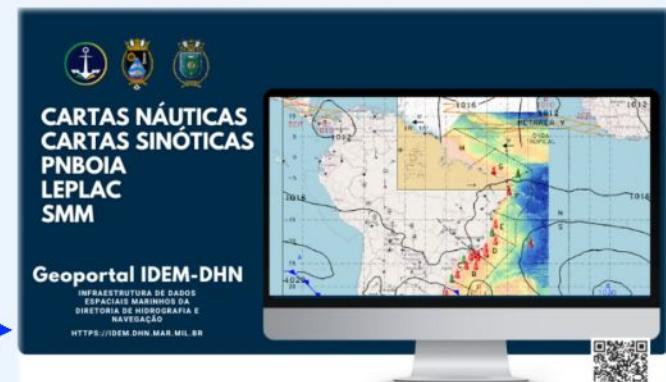
Main actions on DHN-MSDI - Achievement during the year -

- Technological component & Standards

GeoPortal-DHN — VISUALIZADOR DE MAPAS
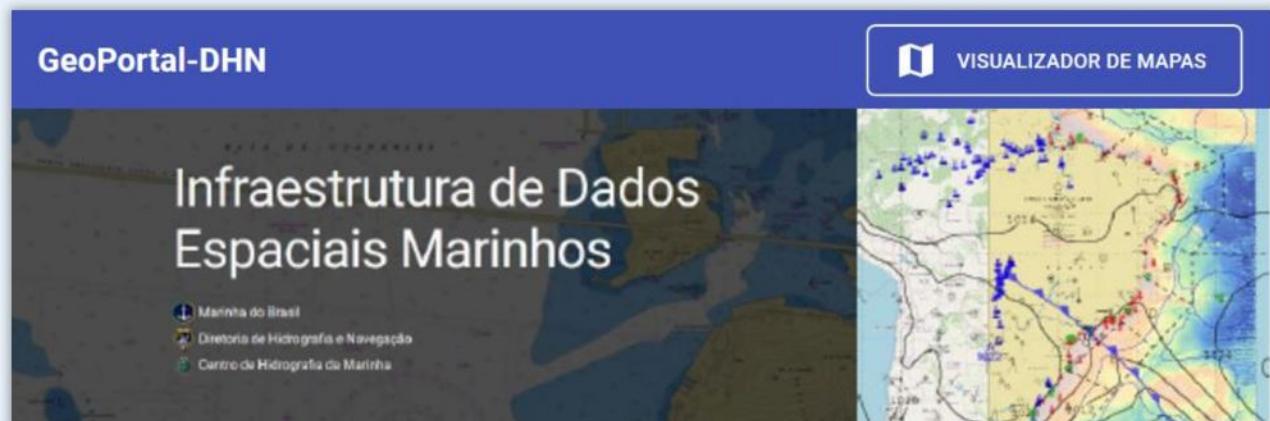
Infraestrutura de Dados Espaciais Marinhos

Catálogo de Metadados — Catálogo de Serviços — Visualizador de Mapas

=> Metadata **(586)**   => Layers **(259)**   => Categories **(9)**

Main actions of **IDEM-DHN** (DHN-MSDI):

$\Rightarrow$ **contribute to NSDI**

$\Rightarrow$ **to support Marine Spatial Planning**

Achievement during the year
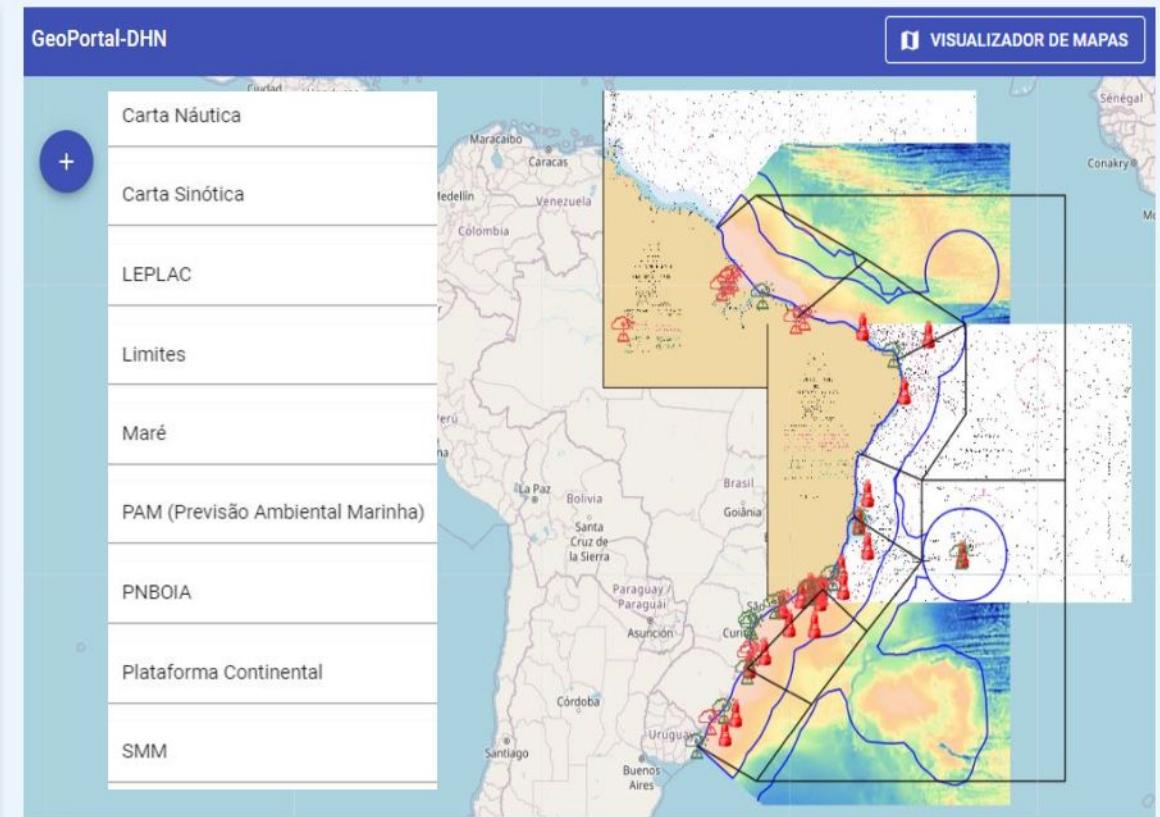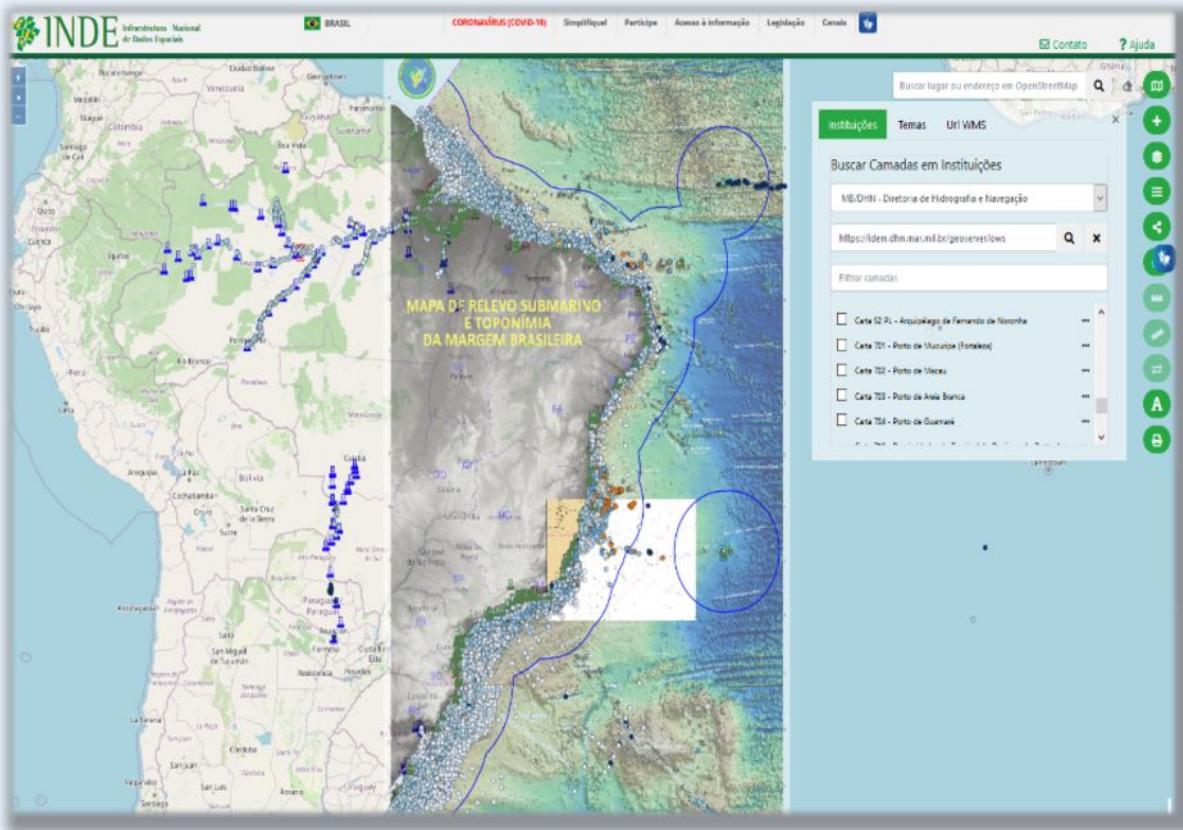
Launch of the Brazilian MSDI (IDEM DHN) as part of the Brazilian SDI in October

https://idem.dhn.mar.mil.br/

8

Challenges and Perspectives

- Conclude the necessary adjustments of environments *GeoNetwork* and *GeoServer* (data loading and integration process of others SDI)**;**

- Development and implementation of more capabilities to user interact with the marine spatial data by the geoportal IDEM-DHN

- Reinforcement of the national maritime identity

Contributing with

UN-GGIM
WGMGI

Pilot project "MSP/SECIRM"

IHO-MSDIWG (SWAtHC and MACHC)

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Lt Cdr. Christopher *(christopher@marinha.mil.br)*