

# Status of IHO MGI Portal

using well-know principles and kernel components of INToGIS

Yong BAEK IHO secretariat / KHOA

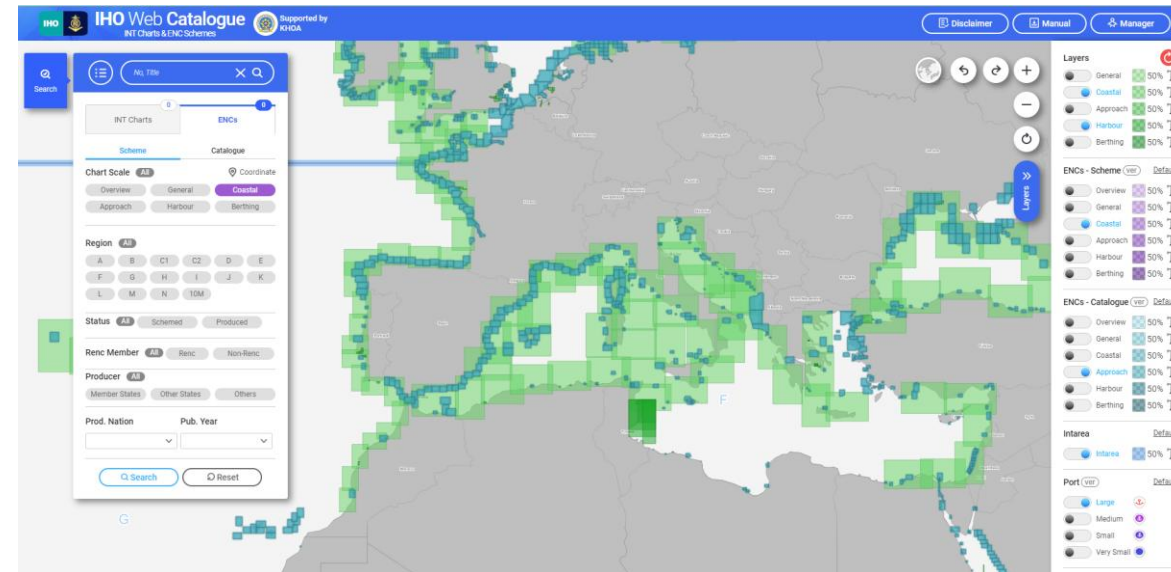
Ver 2.0 / April 2026

## “INToGIS”

A system based on Web GIS solution to support INT Chart Scheme of S-11 including ENC and plan to cover S-100. It provides systematic management procedures and functionality, and facilitating the data sharing among the IHO MSs and other parties with common data format (GML, SHP and EXL)

## Data/layers in INToGIS

- INT Chart /ENC and S-100 products (Plan) metadata: coverage, producer, scale and publication date etc.
- Layers: boundary of INT area and NAV area, World Ports, CATZOC, Traffic Density



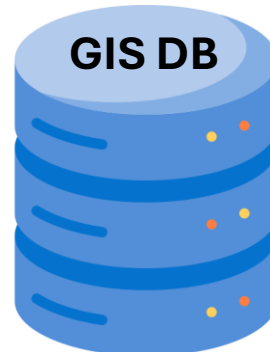
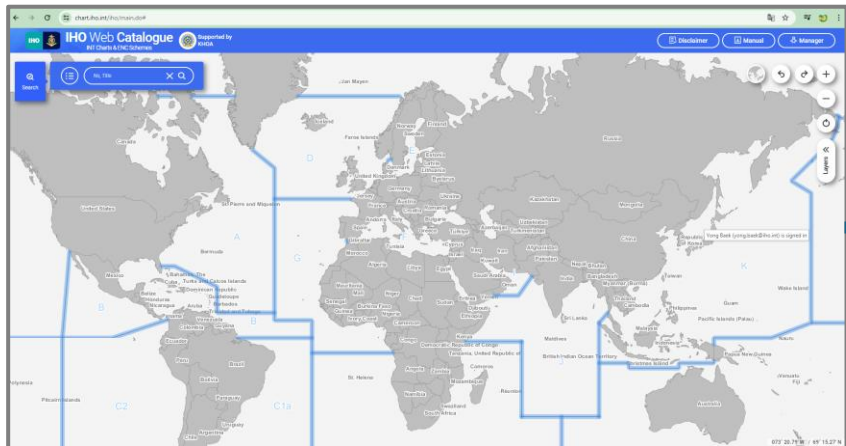
**IHO INToGIS** : operated since 2016

<https://chart.iho.int/iho/main.do>

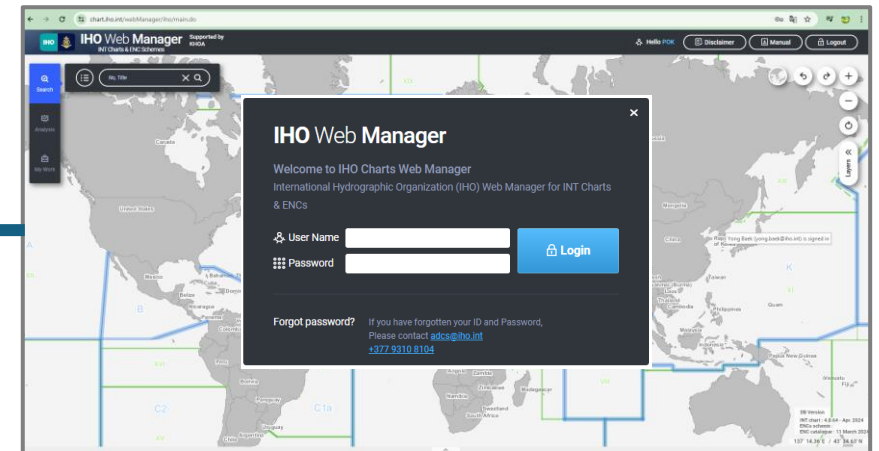
## Two interfaces and ONE Database

- **Web Catalogue:** to provide catalogue information for INT chart and ENC (+S-100) and extra layers (INT area and world ports) for hydrographic communities and Others
- **Web Manager:** to manage data and process of proposals from MSs, regional coordinators and IHO sec in steps, and extra layers(Web Catal. + CATZOC, NAV area, Traffic Density) for IHO MSs, regional coordinators and IHO sec.

Web Catalogue



Web Manager



## Council 7/23

In accordance with Decision A3/8c, the Council noted that IRCC tasked the MSDIWG to not invest in another portal, but to focus on global thematic layers by means of the existing IHO GIS infrastructure (like those already available on the **INToGIS**).

## MSDIWG Decision 15/03

MSDIWG15 agreed to **adopt INTOGIS** as the framework for the IHO MSDI. The MSDIWG expressed gratitude for KHOA's significant contribution towards advancing this initiative

## IHO MGI Portal

**Re-use** the INTOGIS web catalogue interface to be designated as the **IHO MGI Portal** and enhance the MSDI by integrating **additional layers** either directly through the extra **MSDI DB** or by establishing **connections** with external GIS systems.

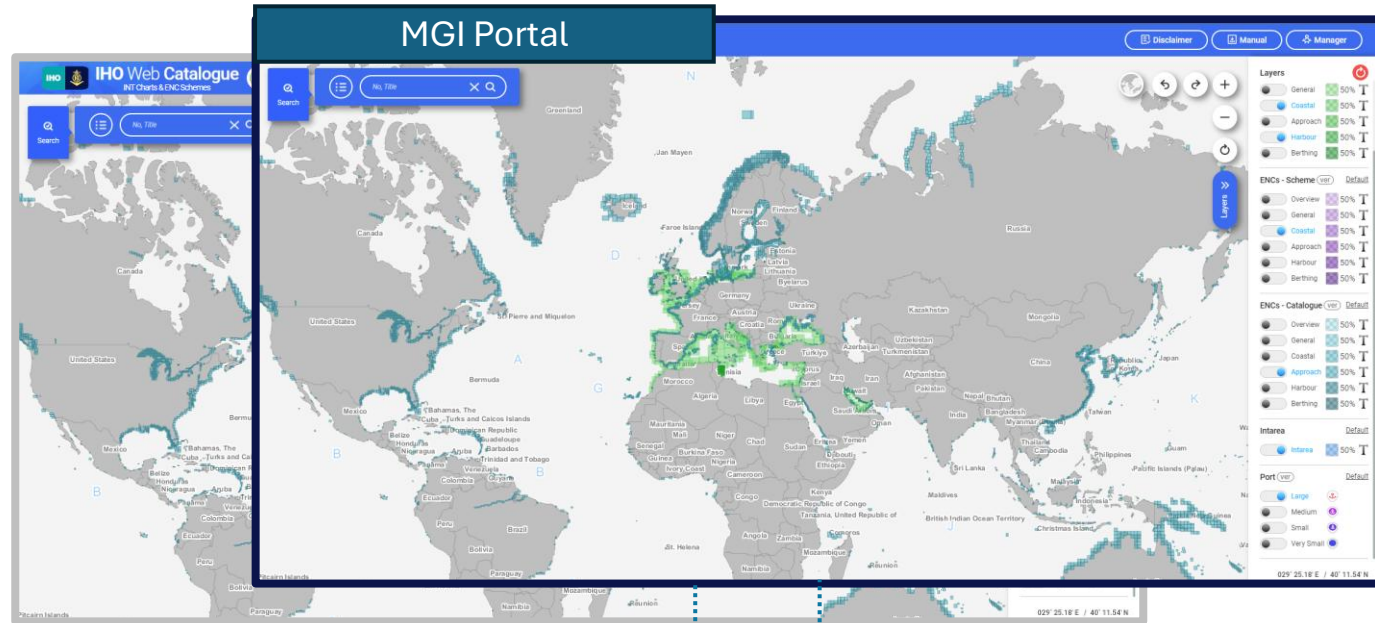
### Key features:

- Door to access various Marine Geospatial Information for Global, Regional and National level
- Display IHO Global Thematic Layers (GTL)
- Provide IHO GTL Data in a standard format of IHO/OGC/ISO
- Bedrock layer: INTOGIS components(UI, Management ROPs) and connection to the INTOGIS DB

# PROPOSAL OF IHO MGI Portal

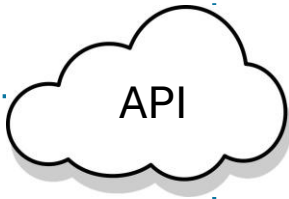
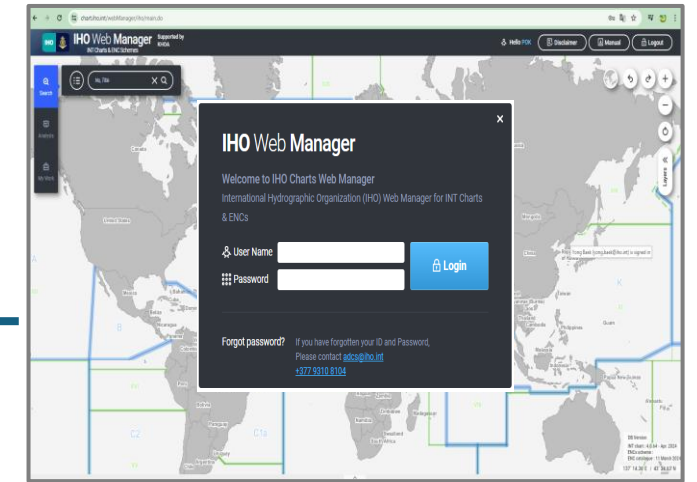
Web Catalogue

## MGI Portal

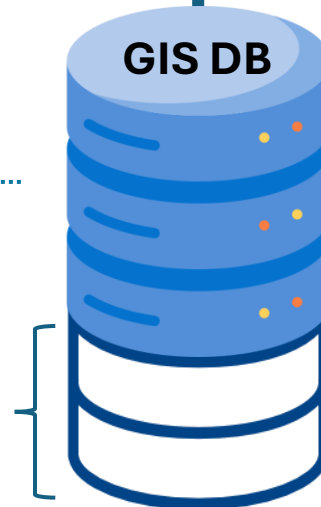


NO CHANGE

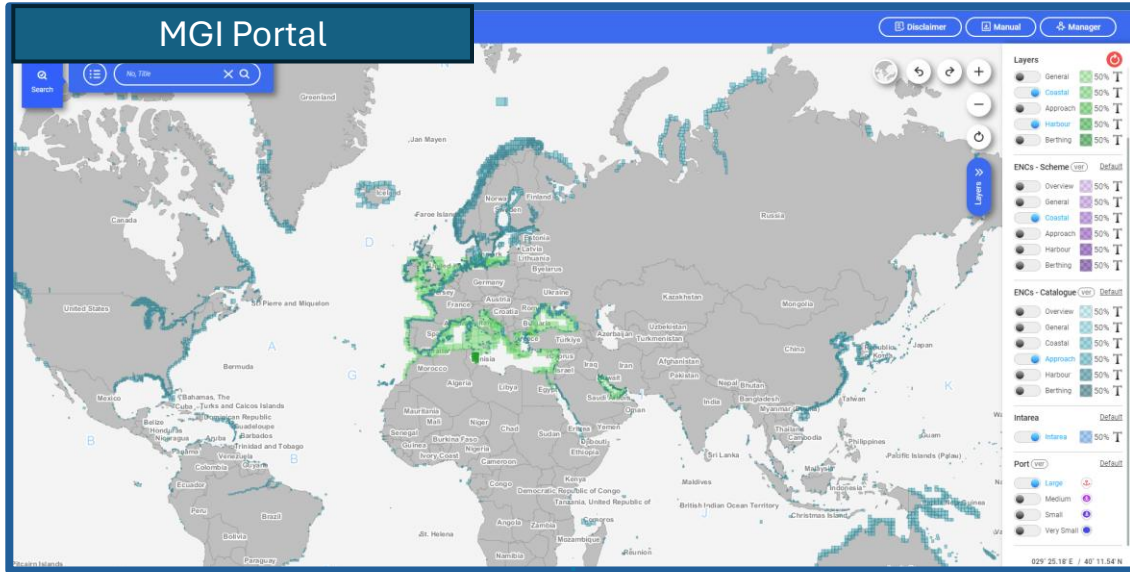
Web Manager



+ Layers

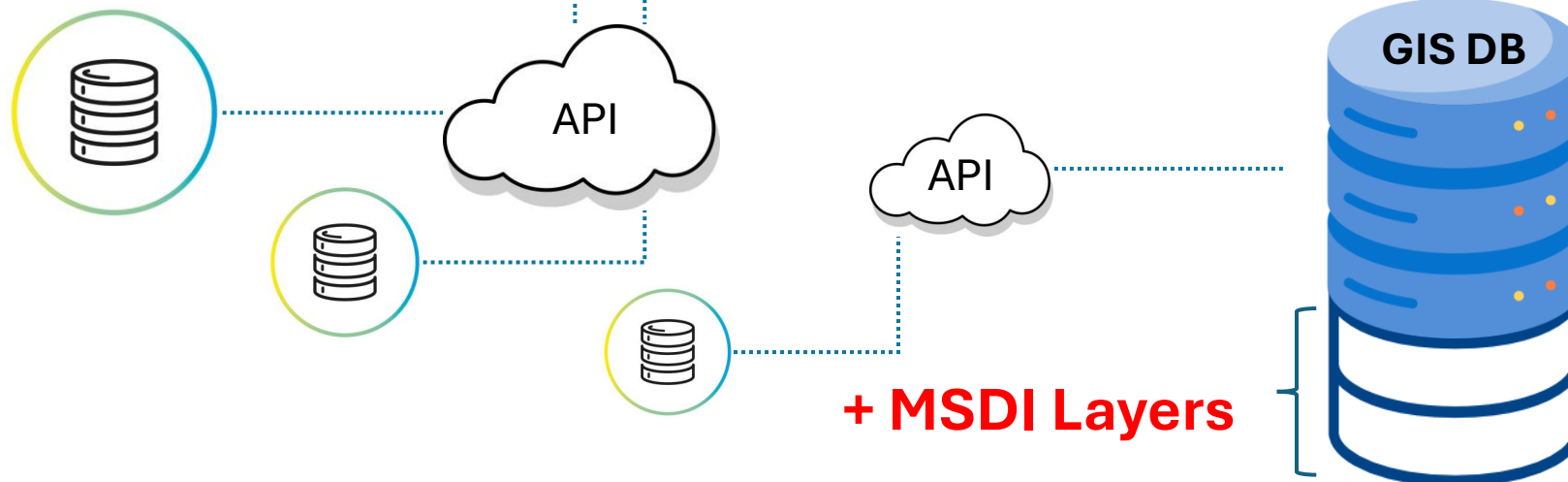


## IHO MGI Portal



### Layers & API connection for IHO MGI

- S-122 MPA (DB or API)
- S-131 Harbor Infra( API)
- National/Regional MSDI Portal (API)
- Global Bathymetry (GEBCO, API)
- ...



# Decision and Actions from IHO MSDIWG

03/2025	Decision: Set up IHO MGI Portal based on INTOGIS system and coordinate with KHOA	Chair, IHO	MSDIWG16	-
04/2025	Decision: MSDIWG to maintain overlay and metadata information on MGI Portal, starting with existing layers	Chair, IHO	MSDIWG16	-
05/2025	Add Work Plan task to maintain MGI Portal and identify additional layers MSDI is in charge of/ owns/ maintains/ updates to populates MGI Portal	Chair, IHO Secretariat	MSDIWG17	Presented to IRCC17 for approval

## Action items

The next step to develop a guidance document for managing the IHO MGI layers/Data. The contents of this guidance can include, but not limited to:

- Procedure for adding new layers,
- Updating existing layers and database within the system,
- Technical guidelines for API connectivity,
- Monitoring and optimization of system performance,
- Additional relevant topics and understandings ...