

First Expert meeting of the UN-GGIM & IHO Joint Working Group on Marine Geospatial Information
with the theme “Advancing Integrated Marine Geospatial Information Management”

Chiang Mai, Thailand
4 – 8 May 2026



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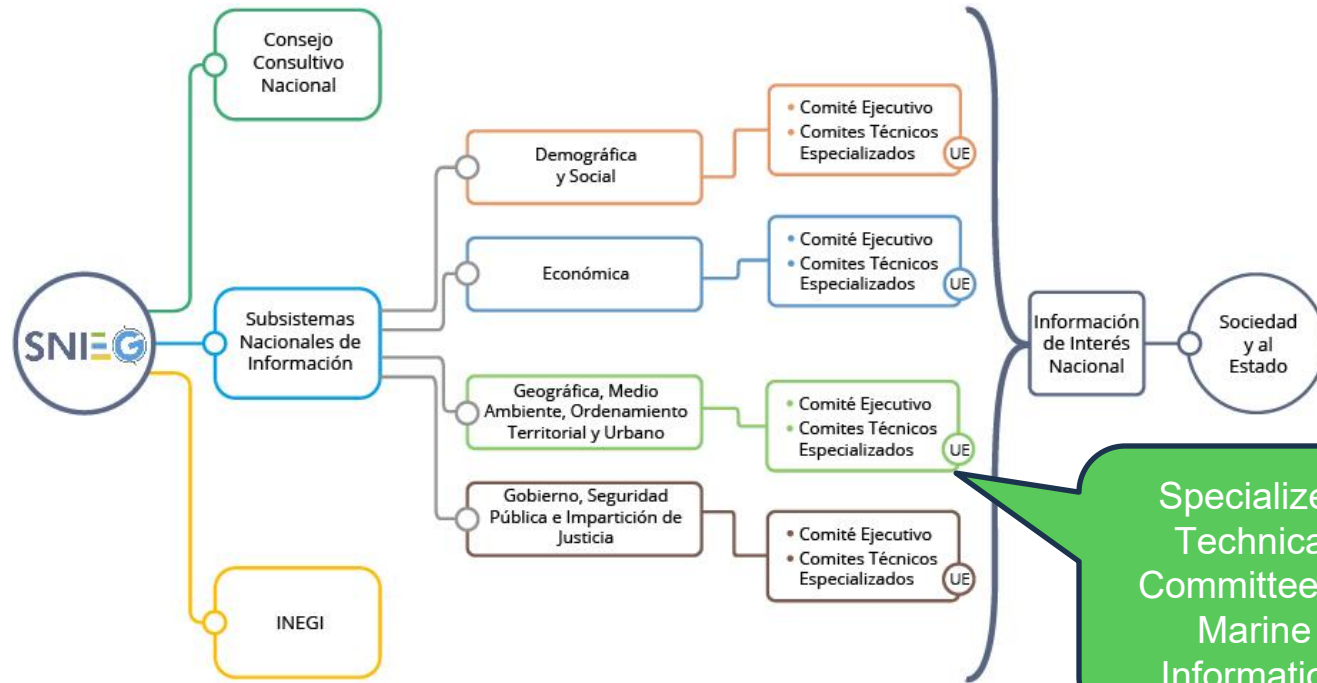
MEXICO



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Where is Mexico today in enhancing the management and use of marine geospatial information ?

Current institutional set-up



1. Ministry of the Navy (Chair)
2. INEGI (Technical Secretary)
3. Ministry of Foreign Affairs
4. Ministry of Environment and Natural Resources
5. National Aquaculture and Fisheries Commission
6. Ministry of Tourism
7. National Institute of Ecology and Climate Change
8. National Commission of Protected Natural Areas
9. Ministry of Public Education
10. Mexican Institute for Research in Sustainable Fisheries and Aquaculture
11. National Commission for the Knowledge and Use of Biodiversity
12. Water National Commission
13. Mexican Geological Survey
14. Academia



Where is Mexico today in enhancing the management and use of marine geospatial information ?

Main datasets

- Protected Natural Areas
- Exclusive Economic Zone
- Border lines
- Incidents in the hydrocarbons sector
- Coastline
- Natural emanations of hydrocarbons and gas
- Electronic Nautical Charts (Raster and Vector)
- Tide tables
- Water column profiles
- Geomorphology of the seabed
- Island inventory
- Characteristics of Bridges in Navigable Areas
- Ferry Routes
- Official name of geographical features of the coast
- Contour lines
- Oceanographic data on surface ocean currents
- Oceanographic data of underwater sediments
- Bathymetric information
- Oil platforms
- Gas pipelines, cables and submarine oil pipelines
- Oceanographic observations with buoys
- Arrival point information
- Mean sea level
- Straight and normal baselines of the Gulf of Mexico and Caribbean Sea
- Seabed mapping
- Uses of the seabed
- Industrial unloading booms
- Delimitation and characterization of coastal and marine ecosystems
- Location and extent of mangroves, marshes, seagrass beds, macroalgae and reefs (carbon sinks - blue carbon)
- Condition of coastal dunes, erosion zones and coastal accretion zones
- Exploitation of the seabed (mining)
- Marine ecological management

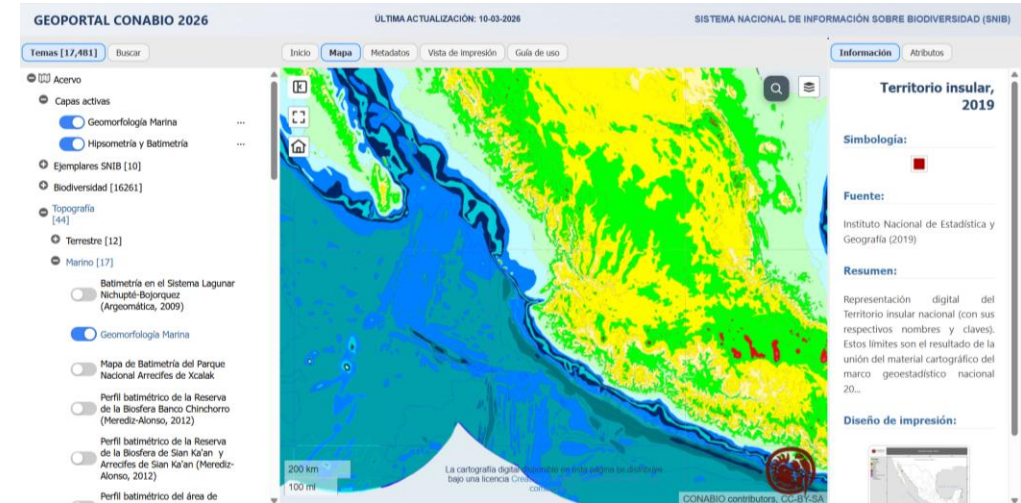
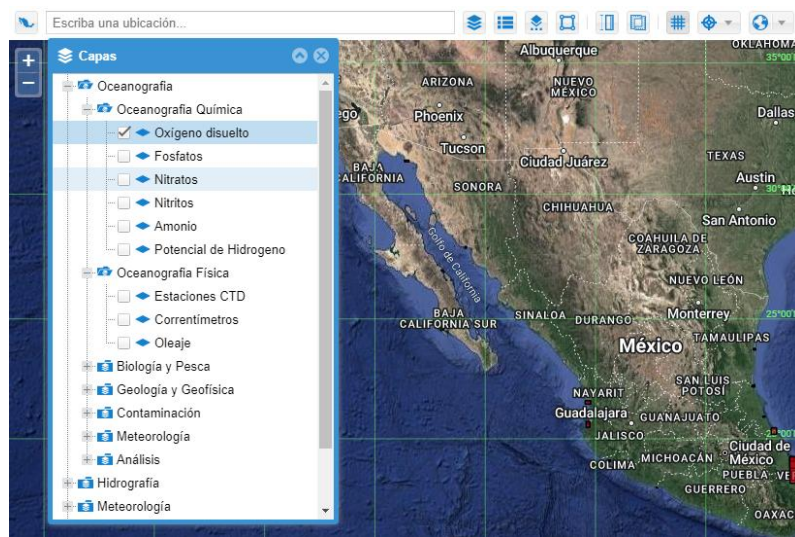


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Platforms

- Archivo de Información Oceanográfica (AION).
<https://diredimoat.semar.gob.mx/oceanografia/AION.html>
- Geoportal CONABIO.
<http://www.conabio.gob.mx/informacion/gis/>

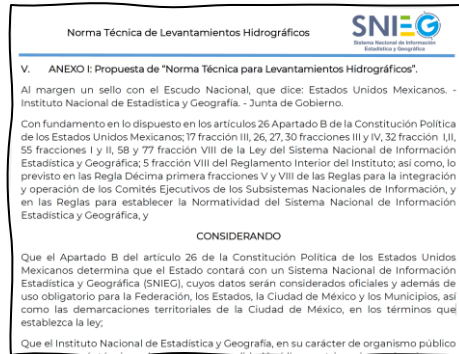


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Recent progress or achievements

- The Technical Committee evaluated the possibility of issuing a Technical Standard to regulate the development of hydrographic surveys by government institutions, thereby standardizing the acquired data. This initiative was deemed appropriate, but it should focus on the metadata of hydrographic surveys, which has not yet begun.



- Similarly, it evaluated a proposal for a bathymetric spatial data infrastructure. Given the complexity of this, a preliminary analysis of budgetary resources is considered necessary.

An “**Identification of Information in the Marine Environment**” was completed. This consisted of identifying information within the members of the Technical Committee.

Unidades del Estado	Fuentes de Información por Tipo			Necesidades de Información por Tipo		
	Estadística	Geográfico	Ambos	Estadística	Geográfico	Ambos
Centro de Investigación Científica y de Educación Superior de Ensenada			3	1		1
Comisión Nacional de Áreas Naturales Protegidas			8		2	
Comisión Nacional de Hidrocarburos		5	5		4	2
Comisión Nacional del Agua			1	1		
Instituto de Ciencias del Mar y Limnología, UNAM			1	5		3
Instituto Nacional de Ecología y Cambio Climático			4			
Instituto Nacional de Estadística y Geografía		3				
Instituto Nacional de Pesca y Acuicultura			1			
Secretaría de Economía	1	1				
Secretaría de Marina	1	1	12	6	9	
Secretaría de Medio Ambiente y Recursos Naturales			2			41
Total	2	10	37	13	15	47
Total general		49			75	

- A set of data collected by the vessel “Dr. Jorge Carranza Fraser,” operated by the Mexican Institute for Research in Sustainable Fisheries and Aquaculture (IMIPAS), in the marine environment is under evaluation as a proposal for Information of National Interest.



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Where does Mexico aim to be in the next five years?

Expected policy or governance improvements

1. Regulatory provision related to bathymetric survey metadata.
2. Regulatory provision related to the generation, integration, and interoperability of oceanographic data.

Integration across institutions

To encourage the Committee's work to make more significant progress in efforts to coordinate and unify data and platforms



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What do we see as the main challenges in reaching this “ideal” situation within the next five years?

Governance or coordination

Give higher priority to marine geospatial information

Funding and sustainability

Establish mechanisms for unifying budgetary resources

Data availability or quality

- Comply with FAIR principles on existing platforms
- Unify platforms

Standards, policy, or technology constraints

Ensure that technical standards are widely applied



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What potential opportunities could help address some of these challenges?

Strategies

Raising awareness among high-level decision-makers

Technology and innovation

Working group(s) on Marine Spatial Data Infrastructure



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The UN-IGIF in Mexico

Interactions with UN-GGIM

Mexico's representatives at UNGGIM have had leading roles in promoting the IGIF, at the global and the regional committees.

How the UN-IGIF has been adapted

- Aligning it with the national information system
- Applying the UNGGIM methodology
- Action Plan running and embedded to SNIEG programs

Plans to apply it in future national activities

- Strengthen the National Geoservices Platform as the prototype of the Geoportal for Spatial Data Infrastructure of Mexico.
- Develop a national communication strategy for the effective participation of stakeholders.
- Implement a mechanism for the generation, maintenance, and continuous improvement of fundamental datasets.
- Develop a national geospatial capacity-building plan.
- Define success indicators to evaluate progress and the achievement of established objectives.



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How familiar is Mexico with IHO C-17?

Interactions with IHO

The Ministry of the Navy is member of the IHO as the national hydrographic authority.

How the IHO C-17 has been used, referenced, or adapted

- It is used in the nautical chart's elaboration by the Ministry of the Navy, ensuring interoperability with topographic, environmental and climatic data.
- It facilitates international cooperation, as Mexico shares data with the IHO and with initiatives of the UN Ocean Decade.
- It strengthens the transparency and accessibility of hydrographic information for institutions and users.

Plans to apply it in future national activities

Continue applying it to gain benefits in decision-making regarding coastal planning, maritime safety and environmental protection.



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What kind of support would Mexico like to receive from UN-GGIM-IHO Joint Working Group?

- Guidance and methodology



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