

IHO-S121 Maritime Limits and Boundaries

A standard for the electronic deposit and exchange of maritime limits and boundaries defined under UNCLOS compatible with the ISO-19152 Land Administration Domain Model that together will allow the Seamless Administration of Land and the Oceans.

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Background



The United Nations General Assembly requested the Secretary General to

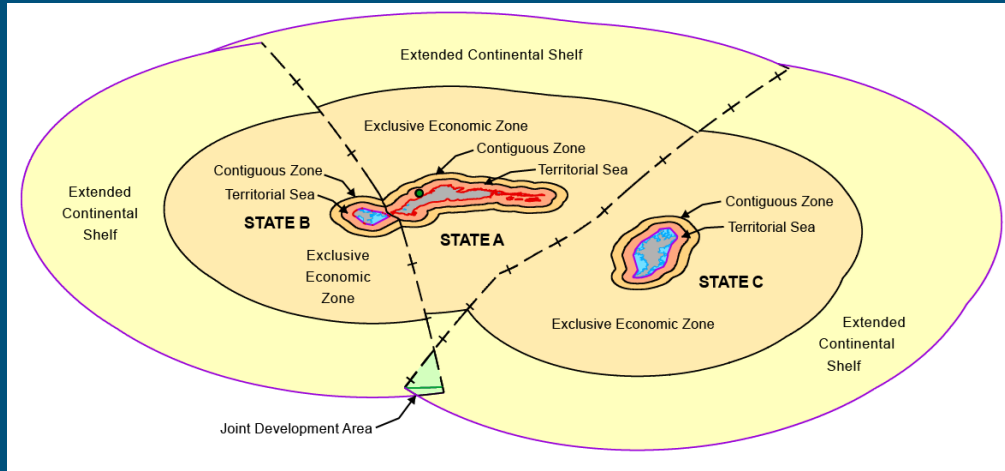
“**improve** the existing **Geographic Information System** for the deposit by States of charts and geographical coordinates concerning **maritime zones**, including **lines of delimitation**, submitted in compliance with the Convention, and to **give due publicity thereto**, in particular by implementing, in cooperation **with ... the International Hydrographic Organization**, the technical standards for the collection, storage and dissemination of the information deposited, in order to **ensure compatibility** among the Geographic Information System, electronic nautical charts and other systems developed by these organizations.”

A/RES/59/24

The S-121 Standard

The data model as a foundation serving generic use cases

DATA MODEL



USE CASES

Navigation and Enforcement

Legal Declaration

Authoritative Public Data

Marine Spatial Data Infrastructure (MSDI)

One to One relationship

Legal Registry

The screenshot shows the 'Federal Register of Legislation' website. The main content area displays the 'Seas and Submerged Lands Act 1973'. The page includes a table of contents, a 'Text' tab, and a 'Download' button. The table of contents lists sections such as 'Part I—Preliminary', 'Part II—Sovereignty, sovereignty rights and rights of control', and 'Part III—Continuity, sovereignty rights and rights of control'. The page also features a search bar and a navigation menu on the left.



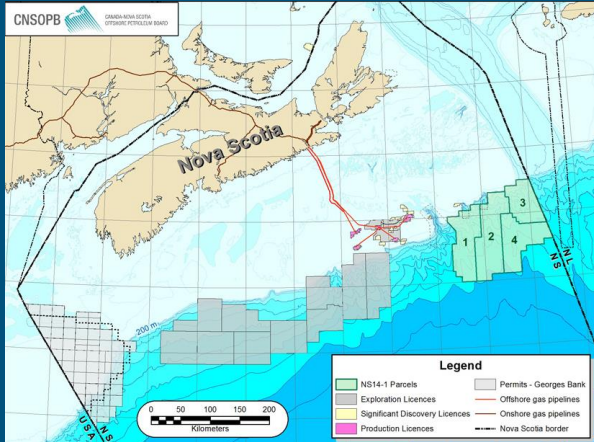
Spatial Registry

The screenshot shows the 'Seas and Submerged Lands Act 1973' Spatial Registry. The map displays the geographical boundaries of Australia's territorial waters and maritime zones, including the continental shelf and exclusive economic zone. The map is overlaid with a grid and includes a search bar and navigation controls. The text 'Seas and Submerged Lands Act 1973' is visible at the top of the page.

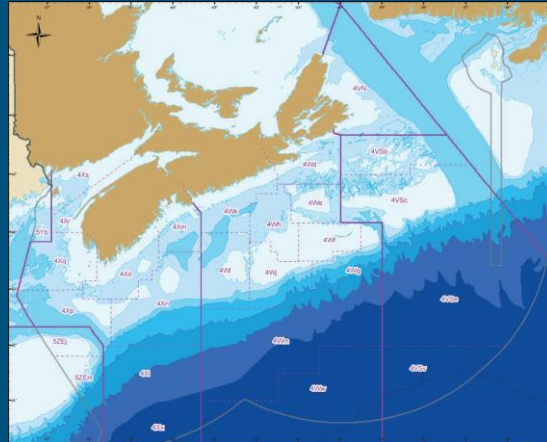
Extended uses for S-121

MSDI

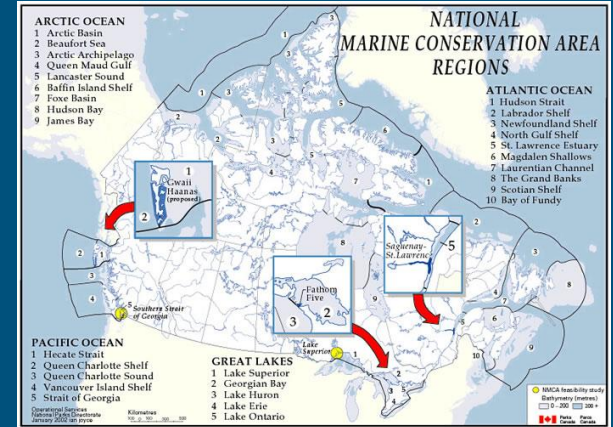
Petroleum Leases



Fisheries Zones



Marine Conservation Areas



Implementation / Operationalisation

- Must be hand in hand with legal institutions and infrastructure
- Ongoing value of IHO S-4
- Datum harmonisation
- Precision and densification
- Data persistence
- Non-Specialist access – due publicity
- OGC Pilot
- Work with developing States to achieve practical implementation

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Making location count.

**INTERNATIONAL HYDROGRAPHIC
ORGANIZATION**



**REGULATIONS OF THE IHO FOR
INTERNATIONAL (INT) CHARTS
AND
CHART SPECIFICATIONS OF THE IHO**

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Land Administration



ISO-19152 LADM

ISO-19152 Part 3
(Marine Georeg)

+

MPA

Fisheries
Petroleum
Crimes

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Navigation

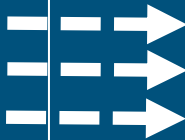


IHO S-100



IHO S-121
MLB (Leg/Nav)

IHO S-122



Conclusion