

Identified Good Practice in Marine/Coastal SDI

Australian Marine SDI (AMISIS)

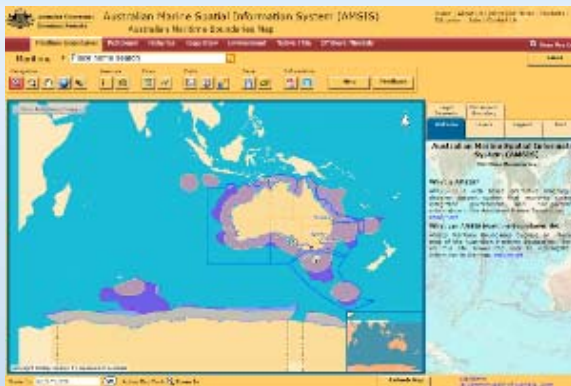
- **Elevation and depth are in the national Foundation Spatial Data Framework**, under custodianship of the Intergovernmental Committee on Surveying and Mapping (ICSM).
- **Bathymetry dataset** includes a 50m multibeam dataset of Australia to provide an understanding of the nature of the seafloor plus various representations of the coast, ranging from lowest to highest tide, to aid in coastal planning and monitoring.
- This data underpins safe hydrographic navigation, definition of maritime and administrative boundaries, emergency management, natural hazard risk assessment, water management, natural resource exploration and exploitation and national security.
- **Started ‘bottom up’ in early 2000’s – now supported from within NSDI.**

Australian Marine Spatial Information System (AMSIS)

- Web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction.
- Contains many layers of information displayed in themes of Maritime Boundaries, Petroleum, Fisheries, Regulatory, Environment, Native Title and Offshore Minerals.
- Data is sourced from Geoscience Australia, other Australian government agencies and some industry sources.
- Contains offshore mineral locations data that was used to create the [Offshore Minerals Map](#).
- Information in this application should not be relied upon as the sole source of information for commercial and operational decisions. **AMSIS should not be used for navigational purposes.**
- Legacy AMSIS contains data from 2006-2014 is being migrated to the current AMSIS.
- Interactive Maps is a discovery and exploration view of Geoscience Australia's geospatial services. Each map has queries and functions with linked access to OGC web services and metadata.
- Visit AMSIS Interactive Maps here:

<http://www.ga.gov.au/interactive-maps/index.html#/theme/amsis>

Australian Marine Spatial Information System (AMSIS)



Legacy AMSIS data

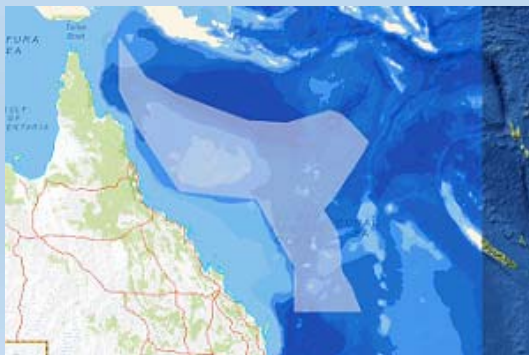


Australian Ocean Governance and Related Legislation

<<<<- Fisheries Act(s) Related ->>>>



Seas and Submerged Lands Act



29/09/2016



INSPIRE 2016 Conference - GSDI Marine SDI Workshop

Good Practice in Marine/Coastal SDI – some examples

USA Coastal SDI

- The Coastal Services Center of NOAA (now the Office for Coastal Management) published in **1999** definitions and goals for the Coastal National Spatial Data Infrastructure within the US NSDI.
- Coastal SDI supported establishing metadata standards within remit of the Federal Geographic Data Committee (FGDC) work on the national Content Standard for Digital Geospatial Metadata (CSDGM) - first published in **1998**.
- Today, Coastal/Marine SDI developments are under the **FGDC Marine and Coastal Spatial Data Subcommittee**. Visit:

<https://www.fgdc.gov/organization/working-groups-subcommittees/mcsdsc/index.html>

USA Coastal SDI

- *“The vision of the US Marine and Coastal NSDI is that current and accurate geospatial coastal and ocean data will be readily available to contribute locally, nationally, and globally to economic growth, environmental quality and stability, and social progress.”*
- NOAA’s **DigitalCoast** is one of the most-used resources in the US coastal management community.
- Visit: <http://coast.noaa.gov/digitalcoast/>





USA DigitalCoast

- **Topics** — This section provides quick links to the top Digital Coast holdings communities use to address common coastal management issues.
- **Stories from the Field** — See how communities throughout the coastal zone use **Digital Coast products**.
- **Digital Coast in Your State** – These reports showcase usage statistics and top products for each state. The **Return on Investment** report is also helpful. Digital Coast costs are compared to the efficiencies gained by the user community.
- **Top Products** — Top **data sets** include **lidar**, **economic**, and **land cover** data. Most used **tools** include the **Sea Level Riser Viewer**, **Land Cover Atlas**, and a **do-it-yourself visualization tool**.
- Have a look at **Contributing Partners** at **<https://coast.noaa.gov/digitalcoast/contributing-partners/>**

Canadian Marine GDI

- **Canadian Marine Geospatial Data Infrastructure (MGDI)** published in 1999.
- Comprehensive 'Marine Use Requirements for Geospatial Data' report in 2001.
- One of the challenges noted 14 years ago was:
 - ***“Capacity building (training) will be needed to create demand for MGDI and to create the capacity to use MGDI to the fullest”*** - a challenge that remains today.
- Marine SDI work in Canada now focuses on **marine cadastre** within the national SDI programme, **GeoConnections**, and development of the **Arctic SDI**, which involves many nations with Arctic connections.
- SDI work in eastern Canada is led by the Coastal and Ocean Information Network Atlantic (**COINAtlantic**), a hub for coastal and ocean information in Atlantic Canada for **ACZISC**, the Atlantic Coastal Zone Information Steering Committee.



<http://coinatlantic.ca/>

The Coastal and Ocean Information Network Atlantic (COINAtlantic) is the ACZISC's (Atlantic Coastal Zone Information Steering Committee) website, a hub for Coastal and Ocean Information in Atlantic Canada. This includes the geospatial tools:

- [COINAtlantic Search Utility](#)
- [COINAtlantic GeoContent Generator](#)
- [COINAtlantic Data Accessibility Self-Assessment Tool](#)

The ACZISC is working to provide open access to data, information and applications relevant to Atlantic Canada through COINAtlantic. COINAtlantic promotes: *Reliable Access, Best Information, and Informed Decisions*.



**Developing a Coastal Characterization
Information Service for the Island of
Newfoundland**

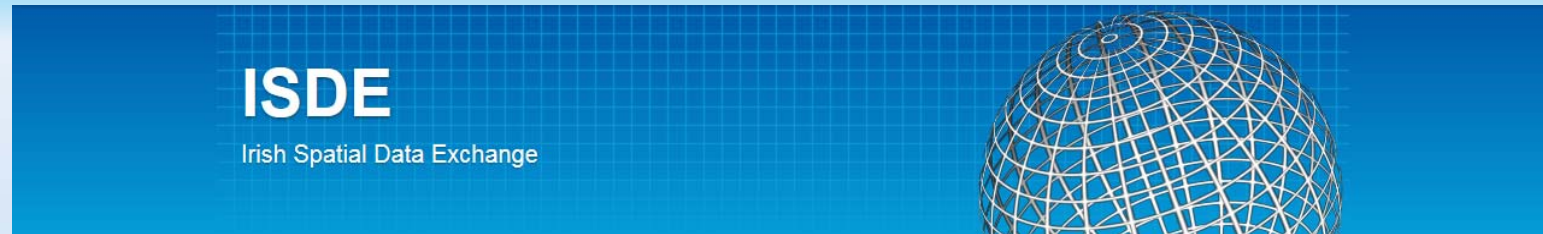


**COINAtlantic
Search Utility
Tools**



**GeoContent
Generator
Tool**

Irish Spatial Data Exchange (ISDE) in Irish SDI (ISDI)



- The Irish SDI is implementing the INSPIRE Directive for a pan-European SDI.
- The **Irish Spatial Data Exchange (ISDE)** is a data discovery tool allowing you to find spatial data and services hosted across multiple government and academic organisations.
- Online data access options are available.
- Assess whether data exist that are suitable for your purpose through the detailed metadata.
- The ISDE was developed by the Marine Institute with partners Geological Survey of Ireland, EPA, Department of Environment, Community and Local Government (DECLG) and Coastal and Marine Research Centre (UCC), with initial funding from multiple sources.

Irish Spatial Data Exchange (ISDE) in Irish SDI (ISDI)

The Data Exchange takes metadata feeds from ISDE partners and other organisations that have contributed metadata to **Irish Spatial Data Infrastructure (ISDI)** catalogue including:

- **All Island Research Observatory NUI Maynooth**
- **Coastal and Marine Research Centre**
- **Department of Agriculture, Food and the Marine**
- **Marine Institute**
- **Geological Survey of Ireland**
- **Department of Environment, Community and Local Government**
- **Environmental Protection Agency**
- **National Transport Authority**
- **Ordnance Survey Ireland**
- **Department of the Arts, Heritage and Gaeltacht**
- **Local Authorities**
- **Petroleum Affairs Division**
- **Property Registration Authority of Ireland**

Some Identified Good Practice & Lessons Learned

- **Marine/Coastal SDI development takes place within existing national SDI (and NII) initiatives/programmes, not in isolation.**
- Marine/Coastal SDI developers need to be fully aware of these initiatives and the requirements these may place on M/C SDI development plans and work.
- **Identify a key organisation to be the leader...**
 - Not easy in the marine/coastal world where there are many disparate sectors involved, typically led by many different government departments – and many of whom do not usually see the need to communicate as part of their legally mandated ‘public tasks’.
 - Requires compromise, cooperation and collaboration at all stages.
- **Adopt national (or better, international) standards wherever possible.**
- **Prepare to adapt to change from the outset – nothing stands still over the periods of time it will take to implement an SDI.**