#### INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

#### 2024 Meeting of the IODE Management Group IOC Project Office for IODE, Oostende, Belgium, 5-7 February 2024

#### STATUS OF THE NETWORK (IODE-27 Action Sheet Para 45) Data centres that report a data discovery portal

IODE-27 "instructed the Secretariat to further investigate this matter [decrease in data centres that report a data discovery portal] and invited data centres to establish data discovery portals". On 21 November 2023 the Secretariat sent an email to all NODCs and ADUs asking the following questions:

- 1. does your NODC have an online (open to the public) data discovery portal where users can search and discover your data holdings?
- 2. If you do not then are you planning to develop this in 2024 or 2025? If not then please explain why
- 3. If you need help to set up such a portal then please let us know
- 4. If you do have such a portal then provide the URL
- 5. If you do have such a portal then have you registered your portal in ODISCat?
- 6. If you do have such a portal then would you be willing to connect to ODIS/OIH? (if you have not done so already)

This document summarizes the responses received by 1 December 2023:

A total of 31 out of 59 NODCs (52.5%) and 20 ADUSs out of 43 (46.5%) responded.

#### Summary of results:

- 1. 18 of the NODCs that responded (58%) have an online data discovery portal
- 2. 18 of the NODCs that responded (62%) have indicated that they are willing to link to ODIS when their data portal is operational but nearly all that have an operational data discovery portal are willing to link to ODIS
- 3. 1 of the NODCs that responded indicated that they are not willing to link to ODIS
- 4. 1 of the NODCs that responded is already linked to ODIS
- 5. 16 of the ADUs that responded (80%) have an online data discovery portal
- 6. 17 of the ADUs that responded (89%) are willing to link to ODIS (10) or are already connected to ODIS (7)

Conclusion: the ADUs are substantially more advanced in sharing their data through ODIS. However overall the response to the survey was somewhat low. It is noted that for 4 ADUs we do not have functional contact information.

It is highly recommended to undertake a promotional campaign for ODIS within the NODC network.

# <u>NODCs</u>

	Country of NODC	Do you have online data discovery portal	If not then are you planning to develop in 2024-25	Do you need help to set it up	If you have a portal then what is the URL	Have you registered your portal in ODISCat?	Are you willing to connect to ODIS/OIH?
1	Argentina	NO	To be online medum-term	YES. The idea is also to start building a georeferenced portal. We will probably need help with software and hardware capable of supporting the initiative.	-	??	YES
2	Australia	YES	-	-	https://portal.aodn.org.au/	YES (REC ID 86)	?? The Australia Research Data Council (ARDC) have arranged the harvest of AODN content from Research Data Australia. Natalia Atkins is working with the ARDC to facilitate this.
3	Belgium RBINS	YES	-	-	https://metadata.naturalsciences.be	YES (rec ID 170)	DONE
4	Belgium VLIZ	YES	-	-	https://marineinfo.org (follow-up of IMIS)	NO	YES ( it is a linked open data feed - ready to ingest in ODIS/OIH)
5	Benin						
6	Brazil	YES	-	Any help to improve our already existing GeoPortal (refer to item (1.a)) is greatly welcomed. Our main tasks now are to improve/ramp up both the "front end" and "the back end" of IDEM-DHN GeoPortal.	https://idem.dhn.mar.mil.br/	NO	Yes, we look forward to learn what is still lacking, and make the necessary adjustements, so we can connect to ODIS/OIH. In fact we've been through a couple of online meetings, but circunstantially

							our team is experiencing a good deal of rotation; we expect that in 2024 we'll be able to accomplish many of our intended developments, which includes being part of ODIS/OIH.
7	Bulgaria						
8 9	Canada	YES starting	YES	NO	ERDDAP - Home Page (dfo-mpo.gc.ca) We have developed a pilot data portal where users can search and discover our data holding. It was developed in ERDDAP. It is located at ERDDAP - Home Page (dfo-mpo.gc.ca). Currently, it only has one Wave dataset. However, we're planning to upload more datasets into the server. We still have many things to do such as convert it from a pilot to a permanent portal and to secure a permanent fundings for this portal. For other dataset that are not on the portal, the users can submit and request form at <u>https://www.isdm.gc.ca/isdm-gdsi/program/index- eng.html</u>	NO	YES
10	Chile	YES/NO	YES	NO	http://surl.li/npuwd (We only have a metadata catalog and some basic statistics to download (monthly historical averages of Sea Surface Temperature and Sea Level). Since 2021 year the Chilean NODC has been part of the SHOA Geospatial Data Infrastructure office and as such will working on the next opening of data and generation of information services.)	YES	YES
11	China					N/50 /	VEC (will read
12	Colombia	YES	-	-	The URL is <a href="https://cecoldo.dimar.mil.co/qeonetwork">https://cecoldo.dimar.mil.co/qeonetwork</a> And we are working on the portal <a href="https://cecoldo.dimar.hub.arcgis.com">https://cecoldo.dimar.hub.arcgis.com</a> and on this geographic application <a href="https://cecoldo.dimar.mil.co/datosDimar/sigSDGOAbiertos/index.xhtml">https://cecoldo.dimar.mil.co/datosDimar.hub.arcgis.com</a> and on this geographic application <a href="https://cecoldo.dimar.mil.co/datosDimar/sigSDGOAbiertos/index.xhtml">https://cecoldo.dimar.mil.co/datosDimar.hub.arcgis.com</a> and on this geographic application <a href="https://cecoldo.dimar.mil.co/datosDimar/sigSDGOAbiertos/index.xhtml">https://cecoldo.dimar.mil.co/datosDimar/sigSDGOAbiertos/index.xhtml</a>	YES (rec ID 3268)	<mark>YES</mark> (will need help)
13	Comoros						
14	Cote d'Ivoire	NO	NO (no database)	YES (could you already advise us on strategies and best practices to re-mobilize all these data providers.)	-	-	YES (when we have database)
15	Croatia	<u> </u>					
16	Cyprus	NO	YES CMMI (a new institute: Cyprus Marine and Maritime Institute) plans to develop a portal for data it collects, but it remains to be seen if this really is expected to be	YES	-	-	-

	1	1					
			able/interested to serve the				
			entire holdings of Cyprus (historical or real time).				
17	Ecuador		· · · · · · · · · · · · · · · · · · ·				
18	France	YES	-	-	<u>http://data.ifremer.fr</u> (french version) <u>http://en.data.ifremer.fr</u> (english version) In particular under "Access data" users can search and discover the data holdings/portals of the NODC and also the portals of major infrastructures (such as SeaDataNet) for which NODC is a major contributor for data and services (such as SeaDataNet)	NO	Y <mark>ES</mark>
19	Germany	YES	-	-	INSITU-Portal: https://insitu.bsh.de/rave/index.jsf Seastate-Portal: https://eastate.bsh.de/rave/index.jsf	NO	YES (planned 2024)
20	Ghana	NO	Hopefully 2026	-	-	-	YES when possible
21	Greece	YES	-	-	https://hnodc.hcmr.gr/services/	YES	??
22	Guinea						
23	India	YES	-	-	https://incois.gov.in/essdp/	NO	YES (planned)
24	Indonesia						
25	Iran (Islamic Republic of)						
26	Ireland	YES	-	-	Marine Data Online <u>https://data.marine.ie</u> The Irish Spatial Data Exchange <u>www.isde.ie</u> Ireland's Open Data Portal <u>https://data.gov.ie</u>	YES	YES
27	Israel						
28	Italy						
29	Japan						
30	Kazakhstan						
31	Kenya	NO	YES	YES	•	-	??
32	Korea (Republic of)						
33	Madagascar	YES	-	-	MACMA (macmatlas.net) (under construction)	NO	YES
34	Malaysia						
35	Mauritania						
36	Mauritius						
37	Mexico						
38	Mozambique	NO	It is planned ONLY for mangrove data- associated with a project. For other data (physical, biological, etc) is required funds to accommodate the portal and training for portal management	YES	-	-	-
39	Netherlands (Kingdom of the)						
40	Nigeria	NO	Maybe	YES	-	-	-
41	Norway	YES	-	-	http://metadata.nmdc.no/UserInterface/#/	YES	YES
42	Pakistan						
43	Panama	NO	YES	YES	-	-	-
44	Peru						
45	Portugal	NO	YES. The development of the	YES	-	NO	YES. IH and IPMA already

			data portal is planned and awaiting funding to proceed. However, one of the main Marine Spatial Data Infrastructures that will feed the portal is already in place (Hidrográfico+ - <u>https://geomar.hidrografico.pt</u> ), and the other one will be in operation in April 2024 ('We are Atlantic' from IPMA).				provides data to some of OIH partners: EuroGOOS, EMODnet, SeaDataNet and OBIS. Still we intend to connect the PT NODC to ODISCat.
46	Romania	YES	-	-	http://86.127.36.60/ronoedc_new/rondc_app-search/search/	NO (to do in 2024)	YES (2024)
47	Russian Federation	NO	NO	-	-	NO	NO
48	Senegal						
49	Seychelles						
50	Slovenia	NO	Maybe	YES	•	-	-
51	Spain						
52	Sweden	YES	-	-	https://www.smhi.se/en/services/open-data/national-archive-for-oceanographic-data/download-data- 1.153150 Or https://www.smhi.se/en/services/open-data/national-archive-for-oceanographic-data	YES	YES
53	Tanzania (United Republic of)	NO	YES Planned In 2024 (The IMS building in Old-stone town in Zanzibar (Mizingani road) was gutted down by fire accident on 2nd October 2021. During this accident the saver room was also completely destroyed.)	YES	-	-	-
54	Togo	NO	NO. NODC has closed now in the geography department at the University of Lomé since the closure of CGILE which was headed by Professor BLIVI. You can help us reorganize the oceanographic data center in the geography department and set up a portal.	YES		-	YES
55	Tunisia						
56	Türkiye (Republic of)						
57	Ukraine						
58	United Kingdom	YES	-	-	https://www.bodc.ac.uk/data/bodc_database/nodb/; other data portals include: https://www.bodc.ac.uk/data/published_data_library/ (data sets with DOIs), https://www.bodc.ac.uk/data/hosted_data_systems/sea_level/uk_tide_gauge_network/ (UK tide gauge_network data), https://www.bodc.ac.uk/data/hosted_data_systems/gebco_gridded_bathymetry_data/ (GEBCO bathymetry).	YES	YES BODC has done some work towards this for our main data portal and hope to continue this in the future with a view to connecting to ODIS/OIH.

59	United States	YES	-	-	NCEI has data search and access services, not a data portal as I understand it: Data	NO	??
50	Office Oldios				archived: https://www.ncei.noaa.gov/; World Ocean		this possibility is
					Database: https://www.ncei.noaa.gov/products/world-ocean-		potentially likely if
					database, http://wod.iode.org/SELECT/dbsearch/dbsearch.html; World Ocean		and when the
					Atlas: https://www.ncei.noaa.gov/products/world-ocean-atlas		data and
							products at NCEI
							are served in the
							cloud. At present,
							it would need to
							be evaluated by
							NCEI
							management.
							The long answer,
							at least from my
							perspective, is
							that probably
							NOAA and NCEI level regulations
							and IT
							assessments will
							most likely be
							needed.

#### <u>ADUs</u>

	ADU name	Do you have online data discovery portal	If not then are you planning to develop in 2024-25	Do you need help to set it up	If you have a portal then what is the URL	Have you registered your portal in ODISCat?	Are you willing to connect to ODIS/OIH?
1	Antarctic OBIS	YES	-	-	www.biodiversity.aq https://ipt.biodiversity.ag	NO	YES
2	ICES ADU	YES	-	-	Metadata: <u>https://gis.ices.dk/geonetwork/srv/eng/catalog.search#/home</u> Data: <u>https://data.ices.dk/view-map</u>	YES	YES
3	MEDIN (UK) ADU	YES	-	-	https://portal.medin.org.uk/portal/start.php	YES (rec ID 40)	DONE
4	SOCIB ADU	YES	-	-	https://apps.socib.es/data-catalog	NO	YES (planned 2024)
5	OBIS Japan JAMSTEC	YES	-	-	https://www.godac.jamstec.go.jp/bismal/e/	YES (rec ID 278)	YES
6	Georgia ADU	NO	YES	Maybe	-	-	-
7	Fish OBIS (Canada, was philippines)	YES	-	-	<u>https://www.fishbase.org/museum/SearchFishCollections.php</u> for occurrences. <u>https://www.fishbase.org</u> for all data about fishes.	NO	YES
8	OBIS UK MBA	YES	-	-	https://www.dassh.ac.uk	YES	DONE
9	Caribbean OBIS						
10	SEAMAP OBIS						
11	WHOI BCO-DMO ADU USA	YES	-	-	https://www.bco-dmo.org/ (sneak peek at our new website launching early 2024 [URL will revert to original]: https://demo.bco-dmo.org/)	YES (rec ID 420, 181, 1237, 3287)	ONGOING
12	USGS/OBIS USA						
13	CEFAS UK ADU	YES	-	-	https://data.cefas.co.uk	YES (ODIS ID: 1082)	YES
14	Black Sea OBIS Ukraine	YES	-	-	https://blackseadb.org/	Yes (rec ID 3273)	DONE
15	South Africa MIMS ADU	YES	-	-	https://data.ocean.gov.za/	YES (rec ID 3092)	ONGOING
16	MABIK OBIS Korea	YES	-	-	https://www.mbris.kr	NO (needs help)	YES when English version is ready
17	INEGI ADU Mexico						

18	ISA OBIS						
10							
19	OPI OBIS Ireland						
20	Iraq ADU						
21	INDOBIS India CMLRE						
22	CAFF OBIS Iceland						
23	MedOBIS/ HCMR	YES/NO	_	_	- we use the IPT http://ipt.medobis.eu/ and also the following data	NO	No response
25		123/110	-	-	service available after registration:	NO	No response
					metacatalogue.portal.lifewatchgreece.eu		
24	OBIS DeepSea (Senckenberg)						
25	CPPS OBIS						
25	CPPS OBIS						
26	GBIF Denmark						
07							
27	OBIS Colombia (at INVEMAR)						
28	INVEMAR ADU	YES	-	Wants	We have 2 portals, Siam Explorer (Documental information & Tabular	Not these 2 but 51	DONE
				some	data) and HUB de Datos Ambientales (Spatial data). The spatial data	other	
				advice	portal exposes the information through OData protocol. Siam Explorer,		
					allows you to search and download data on Documents, environmental conditions, small organisms, environmental quality, ecosystems, resource		
					assessment, flora, fauna and oceanographic physical variables.		
					SiAM Explorer: https://siamexplorer.invemar.org.co/		
					HUB de datos ambientales: https://acceso-datos-ambientales-		
					invemar.hub.arcgis.com/		
29	OTN OBIS Canada	YES	-	-	https://members.oceantrack.org https://members.oceantrack.org/geoserver/	We have registered on	DONE We are willing to
					https://members.oceantrack.org/geoserver/ https://members.oceantrack.org/erddap/	ODISCat our	maintain and
					https://oceantrack.org/ipt/	browser-friendly	extend our
						data portal, a	connectivity to
						separate page on	ODIS/OIH. We
						that portal where	are observing
						public datasets	periodically the interaction
						are disseminated, our ERDDAP	Interaction between OIH
						portal, and our	and our sister
						OBIS IPT. One of	organization
						our co-funded	CIOOS, to
						partners	ensure we
		L				who operate	understand the

30	Barbados ADU					gliders on behalf of OTN among other organizations, CEOTR, has also registered their data portals with ODISCat.	procedures whenever new data products and portals that we create will have to be registered with these.
31		YES				YES (rec ID 86)	YES
	OBIS Australia (CSIRO)				https://www.marine.csiro.au/data/         The CSIRO NCMI ADU has built and maintains a Data Trawler tool which provides access to data holdings related to research vessel and platform surveys from the 1980's to present         day: https://www.marine.csiro.au/data/trawler <ul> <li>Data types include: CTD, hydrology, underway data, wildlife observations, demersal pelagic and benthic occurrences, multibeam and other acoustic data</li> <li>Associated information includes: equipment deployment events, equipment details, publications, reports, other related datasets including links to other data repositories</li> <li>Metadata is managed in the MarLIN catalogue (GeoNetwork) and mapping services are provided via GeoServer</li> <li>Cruise Summary Reports are submitted to SeaDataNet</li> <li>The Australian NODC is the Australian Ocean Data Network and they have a discovery portal here: https://portal.aodn.org.au/</li> <li>The CSIRO NCMI ADU hosts OBIS-AU and publishes marine biodiversity data directly from our IPT to the OBIS international portal (https://obis.org) and to GBIF. We maintain a website to direct users to those portals: https://www.obis.org.au; https://www.obis.org.au/data_search.html</li> </ul>		
32	OBIS Argentina						
33	SEA-OBIS Philippines	YES	-	-	IPT : <u>http://bim-mirror.aseanbiodiversity.org:8080/ipt/</u> ASEAN CHM : <u>https://asean.chm-cbd.net/</u> ASEAN Biodiversity Dashboard : <u>https://dashboard.aseanbiodiversity.org/</u>	NO	YES
34	Namibia Kelp Blue ADU	NO	YES (2024)	-	-	-	YES
35	Malaysia ADU	NO	-	-	-	-	YES

36	Kuwait KISR ADU			
37	OBIS Indonesia (BRIN)			
38	Ecuador INP ADU			
39	Norway Bjerkness ADU			
	(no contact)			
40	Brazil ADU PELD HCES			
	(co contact)			
41	Fish OBIS USA	 		
41	FISH OBIS USA			
42	Colombia UTADEO ADU			
	(no contact)			
40	Oslambia Damusa Masianalas	 		
43	Colombia Parques Nacionales ADU			
	(no contact)			
	(no contact)			