



EMODnet

European Marine
Observation and
Data Network

EMODnet Data Ingestion

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15th EMODnet Technical Working Group
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The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

Webinar ‘Data Management in Offshore Licensing Procedures’

29 February 2024



- The workshop was specifically focused on advancing management practices across member states for marine data acquired in the framework of licensing.
- Governmental stakeholders from 18 different countries participated in the workshop, facilitated by Deltares in the framework of EMODnet Ingestion; 65 participants in total
- **Objectives were:**
 - 1. Present findings on current practices in different Member States, particularly in aquaculture and renewable energy sectors**
 - 2. Exploration if an harmonized approach for data management in offshore licensing procedures is desirable**
 - 3. Lay the groundwork for a roadmap towards a more harmonized approach**
- **Expert presentations were given by Italy, Malta, Estonia, France, the United Kingdom, and Bulgaria**
- Participants emphasized during discussions and MENTI sessions the potential benefits of harmonization, including improved accessibility, comparability and usability of data. The majority of attendees advocated for a more harmonized approach at the EU level.
- This will be followed up as part of the EMODnet Ingestion extension (April 2024 – March 2026)



Migration to Central Portal – Viewing Service

Successful exchange

- The Viewing Service of EMODnet Ingestion publishes the completed submissions
- The submissions follow the ISO 19115 model and are enriched with controlled terms from the SeaDataNet vocabularies, EDMO, EDMERP, and CSR
- Earlier an analysis was made between their metadata format and that of entries in the Central Portal Data Products Catalogue which is a GeoNetWork deployment, which revealed that several fields including vocabs etc were not supported
- An XML output was formulated which includes all fields and using keywords for missing fields as a solution
- An export generator was developed to generate XML files for each published Submission (currently circa 1400+)
- The generated XML files are made available by a GeoNetWork instance using the WAF protocol
- Tests with CP Catalogue were successful and records are fully imported very fast, while for updating all records are overwritten, using Datestamp as trigger

The screenshot shows the 'DATA INGESTION PORTAL' interface. It features a search bar at the top right and a navigation menu with items like 'ABOUT', 'DATA SUBMISSION', 'OPERATIONAL DATA', 'SUBMISSIONS', 'GUIDELINES', 'HELP', 'PROMOTION', and 'CENTRAL PORTAL'. The main content area is titled 'View submissions' and includes a 'Filter Search' section with fields for 'Free search', 'Data type', and 'Geobox'. Below this, there are three search results, each with a title, period, and observation type. A large yellow arrow points downwards from the search results area towards the 'European Marine Observation and Data Network (EMODnet)' logo at the bottom of the page.

The screenshot shows the 'EMODnet Central Portal Catalogue' interface. It features a search bar at the top right and a navigation menu with items like 'Home', 'Data Services', 'Submission', 'Themed', 'Community Pages', 'State of the Data', 'EO Data', 'News & Events', and 'FAQ Downloads'. The main content area is titled 'View submissions' and includes a 'Filter Search' section with fields for 'Free search', 'Data type', and 'Geobox'. Below this, there are three search results, each with a title, period, and observation type. A large yellow arrow points downwards from the search results area towards the 'European Marine Observation and Data Network (EMODnet)' logo at the bottom of the page.

Migration to Central Portal – Viewing Service

Need for improved User Interface at CP Products Catalogue



- This is not only relevant for Ingestion but for all EMODnet Products

Issues:

- Detail pages are divided over multiple sections which makes it cumbersome to oversee a detail page in one glance and leads to necessity to click many times before you see the details that you want
- In particular, download links are hidden behind ... and require many clicks, which in practice leads to users not finding these, while the available download button gives metadata options
- Facet searching is configured in particular for geographic mapping products while EMODnet products have more marine content details. The effect is that the facets are not useful for queries and only option is browsing through the listed entries, which is highly inefficient



4036 HRDTM 1/64 Cumeccs Canyon

The data were acquired with Reson SeaBat 7150 and 8111 multibeam echosounder systems on board the R/V OGS Explora in order to cover the Malta Escarpment for a geological survey in the framework of EU FP7 project SCARP.

Identification Content ReferenceSystem Quality Constraints

ts ...

Download

Permalink

Export (ZIP)

Export (PDF)

Export (XML)

Export (RDF)

SEMAPS

- 0001 (18)
- 0004 (198)
- 0007 (1918)
- 0010 (208)
- 0011 (488)

FORMATS

- Complete and Partial SeaCDF (100)
- ECHO AD201 (98)
- ECHO Interpolated (34)
- ODK (202)
- SeaTOP (228)

REPRESENTATION TYPES

- Vector (148)
- Grid (82)
- Raster (1)

UPDATE FREQUENCIES

- Not planned (28)
- As needed (178)
- Unknown (17)
- Quarterly (186)
- Irregular (8)

STATUS

- Completed (17)
- In going (2)
- Has not started (28)
- Under development (8)

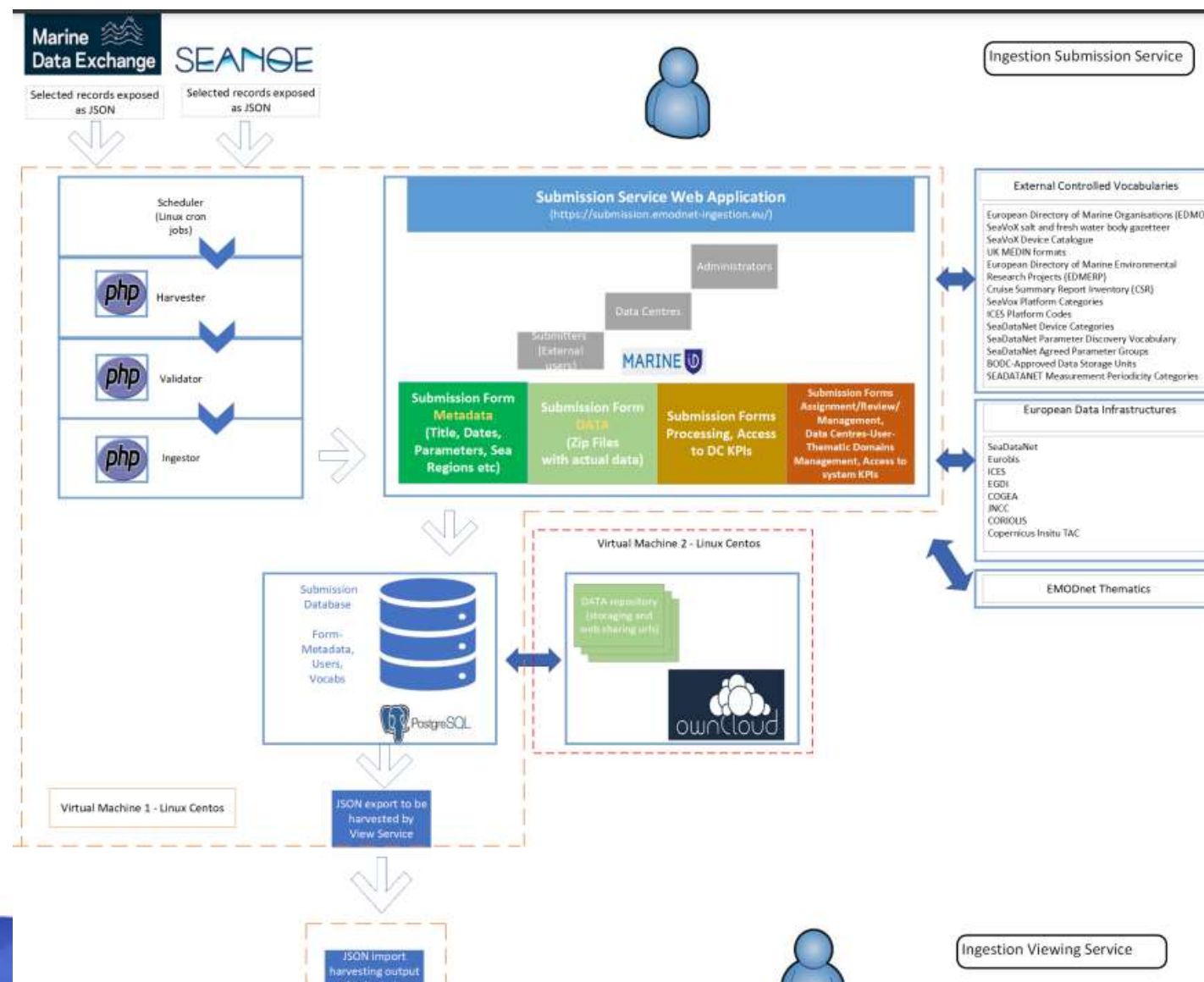
SERVICE TYPES

- OGC WMS (3)
- ERODAP preview (1)

STRONG NEED FOR CUSTOMISED FACET SEARCH AND FULL PUBLICATION PAGES

Migration to Central Portal – Submission Service

Current Logical Architecture
Conversion =>
API based



Migration to Central Portal – Submission Service

Conversion

- purpose
 - serve data in JSON format to clients. Clients render the data to the end-user
- db content handling
 - the server sends data in response to requests. The client application processes data and 'decides' how to present
- separation
 - clear separation between the backend at HCMR (which includes the contents, and provides the API) and the frontend at CP (which consumes the API)

Characteristics

- flexibility
 - different clients can present the data in various ways
- development and maintenance
 - the backend and frontend can be developed and maintained separately

Migration to Central Portal – Submission Service

Conversion status

- API based – on progress
- Develop new front-end consuming API – on progress
- ECAS vs Marine-ID User migration – not started

Migration to Central Portal – Planning

- Migration consists of several activities
 - Narrative => easy
 - Splitting Submission service in front office User Interface at CP and back office API at Ingestion (HCMR) => complex
 - Migrating for Submission Service from Marine-ID to ECAS => complex
 - Exchange between Viewing Service and CP Catalogue => done
 - News items => easy
 - Reports => easy
- The Submission Service split incl AAI change are complex and a first test version might be feasible end of April 2024, which then will be documented in Final Report to be submitted Middle of May 2024
- Public deployment requires thorough testing and implementation of Marine-ID => ECAS migration of hundreds of user logins => feasible in 2024, but not before summer . This will be done as part of the Ingestion extension contract

Exchange Mechanism with Marine Data Exchange (MDE) of The Crown Estate (UK)



- Develop a mechanism for incorporating MDE data in Ingestion
- MDE – Ingestion metadata elements mapping
 - Rules adopted to overcome inconsistencies, e.g.:
 - Resource type: add series in Ingestion
 - Sea areas: mechanism to locate by location (bbox) the applicable sea areas
 - Date handling: keep original publication date in MEDIN as well as publication date in Ingestion
 - Outstanding issues:
 - finalizing acceptable licensing schemas
- Flow:
 - MDE records → json → harvest/validate/map → Ingestion
- Pilot ingesting in place in submission-test environment

Master's Data Submission List

Drop: [v] Entries

Submission Identifier (AZED)	Title of dataset	Status	Assigned Data Centre	Last Update Of	Control
444e02f208-124-4124-00000007222	2011, Series: Tidal Offshore Windfarm, Seawind, Turley	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007442	2010-2012, Royal Haking Off, Trench Offshore Wind Farm, Saltham Reservoir, Monitoring Survey	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007422	2009 - 2015, Sheela-Gannock Offshore Windfarm Ltd, Meteorological Mast Data (EMMAD)	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007212	2005, S&L Ltd, Lynce Offshore Wind Farm, Baseline Marine Turley	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000006418	2002-2004, TCE, Raven Rigg, Aerial Boat Survey Data	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000011442	2010, S&L, Zone 7, Hatched Bay, Geological Turley	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007102	2012, Pugh, Drighthead, Saltham Ltd, Zone 7 Hatched Bay West side of Wight, Marston, Seawind, Baseline Survey	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007282	2010, Centre for Maritime and Coastal Studies Ltd, (CMACS), Saltham Basin, Offshore Wind, Pugh, Pugh, Agrihydrom (Map of Commercial Fish Survey 14M Beam Track)	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000007108	2011, S&L Ltd, Lynce Offshore Wind Farm, Cable Route Unlicensed, Dynamic Survey 001	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete
444e02f208-124-4124-00000006482	2009, S&L, Zone 7, Saltham Basin, Offshore Wind	W Form part 1 submitted by Data Submitter		2024-05-07 11:18:15.40919	View Edit Delete

Showing 1 to 10 of 1428 entries

Previous 1 2 3 4 5 10 Next