



EMODnet



European Marine
Observation and
Data Network

EMODnet Thematic Lot n°2 – Seabed Habitats

CINEA/EMFAF/2022/3.5.2/SI2.900370

Start date of the project: 25/09/2024 (24 months)

Phase V

Quarterly Progress Report (4)

Reporting Period: 01/07/2024 – 30/09/2024



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1. Highlights in this quarter

Task 1: Maintain and improve a common method of access to data held in repositories

ISPRA has continued data submission discussions with the partners and the work on data collection is progressing as planned. Additional datasets from third parties have been identified and partners are working on accessing them. Some have already been acquired and published, including e.g. *Posidonia* and other habitat data from Cyprus.

Task 2: Construct products from one or more data sources that provide users with information about the distribution and quality of parameters in time and space

GEUS has had meetings with EMODnet Geology to discuss the timeline of the EUSeaMap work and the development of the substrate layer. The handing over of the EUSeaMap development from Ifremer to GEUS is in progress and an internal workshop on this will be take place in December.

CCMAR has been working on the Essential Fish Habitats (EFH) composite product and the first version is expected to be ready for partners' review by the end of October. The updated product will provide significant improvements on the previous version. The work on the other composite products, namely on the extent of coastal wetland type wetlands, has made notable progress and those related to Vulnerable Marine Ecosystems (VME) and Biogenic substrate layer have already started.

Task 3: Develop procedures for machine-to-machine connections to data and data products

As part of D4.05 “Direct link to services from the Regional Sea Conventions (where feasible)” we re-investigated existing external web services to see if there were other layers which we could harvest using machine to machine connections. No additional datasets were identified, beyond what is already available via machine-to-machine connections from Seabed Habitats.

Task 4: Contribute data, data products and content to EMODnet central portal that allows users to find, view and download data and data products

We continue to work closely with the Central Portal (CP) team to facilitate the optimum display of our data and products on the map viewer, finding solutions to issues as they arise in a timely manner. As part of this collaboration three new layers have been added to the central portal viewer: MSFD benthic broad habitat type maps, HELCOM HUB classification maps, and a reference layer signposting all the modelled data products available in Seabed Habitats. A bulk upload of data to the portal consisting of 61 new datasets, 32 seabed habitat and coastal wetland maps, 27 essential fish habitat maps and models and two point datasets was carried out in September. A list of all the new data and products that have been published via EMODnet Seabed Habitats in year 1 (D4.03) has also been collated and published on the central portal. This deliverable sign points users to the new data on the central portal and highlights the data providers for this new data.

MI, Syke and other partners have been promoting ESH products via EMODnet news, Twitter and LinkedIn to ensure that potential users are aware of them.

Task 5: Contributing static content to dedicated spaces in the Central Portal

We continue to work closely with the CP team to facilitate up to date and relevant information relating to EMODnet Seabed Habitats (ESH) on the CP. The update of the ESH content to reflect the status of the current phase was commenced in Q1 and completed by the CP Team in Q3.

Task 6: Ensure the involvement of regional sea conventions

The MI participated in a 2-day workshop “Advances in MPA monitoring and habitat mapping”, hosted at University College Cork which facilitated direct engagement with the national OSPAR representative regarding the potential to co-operate on development of composite products in ESH. This was followed by a preliminary meeting at the MI with the managers of the MSFD Assessment team (based at the MI) on the types of composite products that may facilitate the assessments.

Syke have discussed with HELCOM on how to facilitate data provision by HELCOM Contracting Parties for the update of the Essential Ocean Variables.

Task 7: Contribute to the implementation of EU legislation and broader initiatives for open data

EMODnet Biology is arranging an online workshop for the EU HORIZON projects in November, Syke has taken part in the planning and will attend the workshop to present ESH.

The MI participated in the ICES Science Conference in September and contributed to the ICES Science Committee (SCICOM) meeting, highlighting EMODnet Seabed Habitats’ (ESH) ongoing efforts to engage with ICES Working Groups (WGs) and Expert Groups (EGs). ICES is developing a new approach to enhance cooperation with international projects, and ESH will present an update at the upcoming ICES Working Group for Marine Habitat Mapping meeting. During the conference, MI expressed the importance of continued collaboration with ICES WGs and EGs, while exploring how EMODnet Seabed Habitats products could support the work of ICES. Following these discussions, ESH reiterated their message via email, with further dialogue planned. In parallel, CCMAR has been engaging with several ICES WGs through their work on WP3 Composite Products.

In this quarter we have made contributions to the EDITO-Infra project, checking and correcting the categorisation of our data products and identifying the appropriate parameters to be integrated into the data lake.

Task 8: Monitor quality/performance and deal with user feedback

We continue to respond promptly in response to user feedback received directly and via JIRA. During this quarter we have had a number of queries looking for specific data downloads and corresponding reports. This highlights the need to improve the sign posting of these in the data catalogue and upcoming work to standardise the metadata should help with this. We will also look to enable the download by area option for more of our layers on the viewer to ensure ease of user access.

| Status of the Milestones and Deliverables listed in the workplan | | | | | |
|--|-----|------------|------------------------------------|----------------|---|
| Milestone/Deliverable in numerical order | WP | Date due | Status (To do/ Delivered/ Delayed) | Date delivered | If Delayed: reason for delay and expected delivery date |
| D1.01: Modified substrate data product including biogenic substrate and data not possible to include in EMODnet Geology product, but which would improve the broad-scale seabed habitat map for Europe (EUSeaMap) [dependent on new product from Geology] | WP1 | 26/07/2025 | To Do | | |
| D1.02: Confidence layer for modified substrate data product published | WP1 | 26/09/2025 | To Do | | |
| D1.03: Tool to spatially simplify EUSeaMap | WP1 | 26/05/2025 | To Do | | |
| D1.04: Updated broad-scale seabed habitat map | WP1 | 26/09/2025 | To Do | | |
| D1.05: Confidence assessment for updated broad-scale seabed habitat map, in all considered classifications | WP1 | 26/09/2025 | To Do | | |
| D2.01: An expanded library of maps of communities, biocenoses, biotopes and habitats for all of Europe and Caribbean Sea ingested and converted to a standard format, with metadata for every map | WP2 | 26/08/2025 | To Do | | |
| D2.02: An expanded collation of point records of communities, biocenoses, biotopes and habitats for all of Europe and Caribbean Sea ingested and converted to a standard format, with metadata for every dataset | WP2 | 26/08/2025 | To Do | | |

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| D2.03: Updated and integrated templates for habitat map data exchange formats, if needed | WP2 | 26/11/2023 | Delivered | 26/11/2023 | |
| D2.04: Webinars, tutorials or other forms of training material on the EMODnet Seabed Habitats data submission process | WP2 | 26/01/2024 | Delivered | 26/01/2024 | |
| D2.05: An expanded library of modelled maps of specific habitats for all of Europe ingested and converted to a standard format, with metadata for every dataset | WP2 | 26/08/2025 | To Do | | |
| D2.06: Controlled vocabulary lists for classification systems published on NERC Vocabulary Server, as required | WP2 | 26/08/2025 | To Do | | |
| D2.07: An Expanded library of maps of Essential Fish habitats maps for major fish species in the North Sea, Macaronesia, Eastern Mediterranean Sea and, where possible, other European basins, ingested and converted to a standard format, with metadata for every map | WP2 | 26/08/2025 | To Do | | |
| D2.08: An expanded library of coastal wetlands habitats for all of Europe ingested and converted to a standard format, with metadata for every dataset | WP2 | 26/08/2025 | To Do | | |
| D3.01: A list of products to be created or updated and product specifications (New) | WP3 | 26/03/2024 | Delivered | 26/03/2024 | |

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|---|-----|------------|-------|--|--|
| D3.02: A combined, harmonized data product showing the best evidence for extent and distribution of the Essential Ocean Variable “Live hard coral cover” in Europe and Caribbean Sea, with metadata (Update and new) | WP3 | 26/05/2025 | To Do | | |
| D3.03: A combined, harmonized data product showing the best evidence for extent and distribution of the Essential Ocean Variable “Seagrass cover” in Europe and Caribbean Sea, with metadata (Updated and new) | WP3 | 26/06/2025 | To Do | | |
| D3.04: A combined, harmonized data product showing the best evidence for extent and distribution of the Essential Ocean Variable “Macroalgal canopy cover” in Europe, with metadata (Update and new) | WP3 | 26/07/2025 | To Do | | |
| D3.05: A combined, harmonized data product showing the best evidence for extent and distribution of the Essential Ocean Variable “Mangrove cover” in Caribbean, with metadata (Update and new) | WP3 | 26/08/2025 | To Do | | |
| D3.06: A combined, harmonized data product showing the best evidence for the extent of coastal wetland type in Europe and the Caribbean, with metadata (Update and new) | WP3 | 26/05/2025 | To Do | | |

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|---|-----|------------|-------|--|--|
| D3.07: Evaluation of EFH approaches to determine map suitability to combine into products useful for fisheries management and biodiversity conservation (Update and new) | WP3 | 26/05/2025 | To Do | | |
| D3.08: Create a harmonised map of potential VMEs and potential degraded habitats (New) | WP3 | 26/08/2025 | To Do | | |
| D3.09: Combined, harmonized data products showing the best evidence for extent and distribution of habitats defined in other classifications in all regions, with metadata, depending on stakeholder needs (New) | WP3 | 26/08/2025 | To Do | | |
| D3.10: An updated combined, harmonized data product showing the best evidence for the extent of biogenic substrate in all regions, with metadata (Update) | WP3 | 26/01/2025 | To Do | | |
| D3.11: Report detailing the construction of the Essential Ocean Variable data products (Update) | WP3 | 26/08/2025 | To Do | | |
| D3.12: Report detailing the construction of the biogenic habitat data product (Update) | WP3 | 26/05/2025 | To Do | | |
| D3.13: Report detailing the construction of the coastal wetlands habitats data product (Update) | WP3 | 26/05/2025 | To Do | | |
| D3.14: Report(s) detailing the construction of the data products defined by stakeholder needs (New) | WP3 | 26/09/2025 | To Do | | |
| D3.15: Report detailing the construction of the | WP3 | 26/09/2025 | To Do | | |

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| Essential Fish Habitat data products (New) | | | | | |
| D3.16: Report detailing the construction of the harmonisation of Vulnerable Marine Ecosystems (VME) and other priority habitats (New) | WP3 | 26/09/2025 | To Do | | |
| D4.01: Geoserver OGC spatial web-services (WMS, WFS, WCS) and a GeoNetwork INSPIRE-compliant metadata instance | WP4 | 25/09/2023 | Delivered | 25/09/2023 | |
| D4.02: Access all unrestricted habitat ground-truthing data from the EMODnet Biology database via web services | WP4 | 24/09/2025 | To Do | | |
| D4.03: A publicly available list of all new data and products collected and created under WP1, WP2 & WP3 that have been published via EMODnet Seabed Habitats in year 1 | WP4 | 24/09/2024 | Delivered | 27/09/2024 | |
| D4.04: A publicly available list of all new data and products collected and created under WP1, WP2 & WP3 that have been published by EMODnet Seabed Habitats in year 2. | WP4 | 24/09/2025 | To Do | | |
| D4.05: Direct link to services from the Regional Sea Conventions where feasible | WP4 | 24/09/2024 | Delivered | 24/09/2024 | |
| D5.01: Evidence of engagement with RSCs and relevant working groups to gather feedback and needs of habitat data requirements and products that will help | WP5 | - | To Do | | |

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|---|-----|---------------------------------------|-----------|------------|---|
| Member States to fulfil reporting obligations | | | | | |
| D5.02: Infographics illustrating the spatial distribution, resolution and availability of ESH product and data holdings | WP5 | 26/09/2024 | To Do | | |
| D5.03: Infographic on viewing, accessing and downloading ESH product and data holdings | WP5 | 26/11/2024 | To Do | | |
| D5.04: Promotion of data provider contributions in co-operation with the Central Portal via, news items and social media. | WP5 | 26/09/2023 – 26/09/2025 | To Do | | |
| D5.05: Use cases on the EMODnet Central Portal. | WP5 | 26/09/2023 – 26/09/2025 | To Do | | |
| D5.06: Updated prominent summary of the data and data products available from EMODnet Seabed Habitats on the CP (with WP4) | WP5 | 26/09/2024 | Delayed | | Work is in progress but will be delayed until Q1-2025 due to resourcing issues (personnel) at the MI. |
| D6.01: Progress reports to CINEA, DG MARE and EMODnet Secretariat | WP6 | 15th of Jan, Apr, Jul & Oct each year | Delivered | 15/10/2024 | |
| D6.02: Interim report | WP6 | 26/09/2024 | Delayed | | We have asked for a 2-month extension and CINEA has agreed to a delay in submission until end of November 2024. |
| D6.03: Final report | WP6 | 26/09/2025 | To Do | | |

2. Identified issues: status and actions taken

| A. Priority issue(s) identified and communicated by CINEA/ DG MARE/ SECRETARIAT | | | | |
|--|----------------------------------|---|------------|---------------|
| Priority issue | Status (Pending/ Resolved) | Action(s) taken/ remaining actions planned | Date due | Date resolved |
| EM-88 (Sub-task) Seabed Habitats - Web Services MetadataUrl and DataUrl fields | Pending | All metadata url issues resolved. No current outstanding problems but issue remains open as regular checks occur. | none | |
| EM-146 (Sub-task) Seabed Habitats Quality of Service Monitoring: Several of the services did not meet the 99% availability this quarter, and one of the WMS didn't meet the performance requirement of 5 sec. | Pending | Substantial work has gone into investigating the causes of the performance issues and the development of a solution (the so-called 'self-healing' GeoServer. However, this solution is relatively novel as has come across several hurdles. We are currently undertaking a data cleansing process to find and eliminate any geometry issues and to add an additional Geoserver instance to help share the load. | none | |
| EM-391 (Sub-task) SBH review of the new CP Map Viewer | Pending | Tasks complete to date but this issue remains open for future requests for SBH to review the CP | none | |
| EM-644 (Sub-task) Seabed Habitats to provide input to the Tools & Guidelines section | Pending | Tools and guidelines have been added to the central portal. Report uploads are in progress | none | |
| EM-665 (Task) TWG12 - CP & SBH to investigate if CP viewer can deal with layer group styles | Pending | We have investigated this but it does not resolve the duplicated legend issue for group layers in the central portal. A temporary solution has been proposed and work is underway. | none | |
| EM-957 (In Review) EMODnet lots to check if filter values are displayed in the preferred order | Pending | | none | |
| EM-1011 Seabed Habitats to review the guidelines document on metadata harmonization | Pending | | 08/10/2024 | |

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|---|----------|--|------|------------|
| EM-992 (Done) http://www.emodnet-seabedhabitats.eu/ is no longer redirected | Resolved | Fixed re-direct links. | none | 02/08/2024 |
| EM-988 (Done) Seabed Habitats provide update of Themes spreadsheet | Resolved | Seabed Habitats has reviewed the themes and for us this is resolved. | none | 23/09/2024 |
| EM-981 (In Progress) Update of Themes-tab in reporting spreadsheet | Resolved | Seabed Habitats has reviewed the themes and for us this is resolved. | none | 25/09/2024 |
| EM-979 (Done) High - Geoserver < 2.25.2 Remote Code Execution (RCE) vulnerability (CVE-2024-36401) | Resolved | Upgraded Geoserver to version 2.25.2 | none | 04/07/2024 |

B. Issues / challenges identified by the thematic assembly group itself

| Priority issue / challenge | Status (Pending/ Resolved) | Action(s) taken / remaining actions planned | Date due | Date resolved |
|---|----------------------------------|---|----------|---------------|
| EM-412 (New Feature) In the layer catalogue on new central portal, indicate which layer groups contain active layers | Pending | This is an issue/suggestion that SBH made related to the functionality of the CP. As per last TWG the decision is that if SBH wants this functionality implemented, SBH does the development once the viewer code is shared. SBH will have internal discussion on how to proceed. | none | |
| EM-513 (New Feature) In the layer catalogue, add the ability toggle entire layer groups on or off | Pending | This is an issue/suggestion that SBH made related to the functionality of the CP | none | |
| EM-666 (New Feature) TWG12-Advanced filter option | Pending | This is an issue/suggestion that SBH made related to the functionality of the CP. The majority of the filters have been enabled but still missing a gui freetext filter. | none | |
| EM-621 (Improvement) manual sorting of layers, rather than alphabetically | Pending | This is an issue/suggestion that SBH made related to the functionality of the CP | none | |
| EM-623 (Improvement) improve access to metadata and download | Pending | This is an issue/suggestion that SBH made related to the functionality of the CP | none | |

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|--|----------|--|------|------------|
| EM-916 (Bug) products catalogue without filter options | Pending | | none | |
| We have found a problem with the new version of the EMODnet DTM. There are areas, typically bays and estuaries, with depth values that are too high to a sometimes surprising degree. It appears that in all these areas GEBCO 2022 is used. This problem will lead to classification errors in EUSeaMap, and we cannot publish EUSeaMap with such classification errors (they cover too large an area). | Pending | We have reported the problem to EMODnet Bathymetry and discussed it with them. Their view is that the problem should be solved by GEBCO first, and as a result future versions of the EMODnet DTM will de facto be corrected. As instructed in the assessment for the 2023-Q1 progress report, we have submitted this issue as a JIRA ticket assigned to Bathymetry (EM-972). | | |
| We have submitted a number of habitat point datasets to EMODnet Biology during this phase, however since this lacks occurrence data it requires significant technical updates to the EMODnet Biology systems to facilitate the display of this data through their web services. Until this is done we cannot progress our plan to submit the habitat point data via this route. | Pending | Seabed Habitats and Biology have had a number of discussions about this and will continue work on this in 2024. The work on making habitat data not linked to occurrences available has begun but the process is not yet finished as Biology currently have a restriction in place to only publish data that are mapped to a vocabulary that has a short name. This is the case for most BODC collections (P01 being one of them), however it does mean that they are unable to publish the records mapped to EUNIS codes. We will continue to work on this so we can make all data available as expected. | | |
| EM-966 (Task) Seabed habitats: new layers for CP viewer | Resolved | The layers have been published. | none | 30/09/2024 |
| During this quarter we suffered a prolonged period of downtime for the Seabed Habitats CSW due to a cyber attack on ICES who host our metadata instance. This also impacted some of the viewer layers which are cascaded from ICES web services via seabed habitats | Pending | We flagged the downtime with the central portal technical team to ensure that this would not impact the central portal data catalogue. The layers were temporarily hidden on the viewer and cached version of the metadata instance was fixed. We are working with ICES to get the webservices operational again. | none | |

3. Communication assets

| A. (Co-)Authored peer-reviewed publications in the quarter | | | | | | |
|--|---------------------|---|------|---|------------------------------|--|
| Date of publication | Type of publication | Full reference | ISBN | DOI | Is it open access? Yes/No | |
| Sept 2024 | Short Communication | GIUSTI, M., ANGIOLILLO, M., CARO, A. and TUNESI, L. , 2024. Opportunistic predatory feeding behaviour of <i>Munida intermedia</i> A. Milne-Edwards & Bouvier, 1899 targeting juveniles of <i>Lepidopus caudatus</i> (Euphrasen, 1788) in the north-western Mediterranean Sea. <i>Mediterranean Marine Science</i> , 25(3), pp.564-569. | | https://doi.org/10.12681/mms.37486 | Yes | |
| October 2024 | Research Paper | Erzini, K., Sadat, Z., Bentes, L. , Coelho, R., Lino, P. G., Monteiro, P. , Oliveira, F. , Ribeiro, J., Gonçalves, J. M.S. (2024). The potential fish provisioning services of vegetated and unvegetated habitat in a lagoon nursery. <i>Fisheries Research</i> , 278, 107115. | | https://doi.org/10.1016/j.fishres.2024 | Yes | |
| July 2024 | Research Paper | Henriques, N.S., Erzini, K., Gonçalves, J.M.S. , Russo, T. (2024). Let's measure it: An approach of high-resolution estimates of bottom fixed net fishing effort at national level, <i>Fisheries Research</i> , 278, 2024, 107118, ISSN 0165-7836 | | https://doi.org/10.1016/j.fishres.2024.107118 | Yes | |

| B. Other/non-peer reviewed types of publications (co-)authored in the quarter | | | | | |
|---|---------------------|---|--|---|------------------------------|
| Date of publication | Type of publication | Full reference | ISBN | DOI | Is it open access? Yes/No |
| July 2024 | Paper | Katikas, L., Reizopoulou, S., Drakopoulou, P., & Vassilopoulou, V. Using Fishery-Related Data, Scientific Expertise and Machine Learning to Improve Marine Habitat Mapping in Northeastern Mediterranean Waters. <i>Scientific Expertise and Machine Learning to Improve Marine Habitat Mapping in Northeastern Mediterranean Waters</i> . | | https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4891055 | Yes |
| | Research Article | Vallius, H. and Kaskela, A., 2024. Knowledge Based Marine Spatial Planning, Management of Marine Resources and Environmental Assessments–The EMODnet Geology Concept. In <i>Modern Technologies Enabling Innovative Methods for Maritime Monitoring and Strengthening Resilience in Maritime Critical Infrastructures</i> (pp. 238-250). IOS Press. | 978-1-64368-525-0 (print) 978-1-64368-526-7 (online) | 10.3233/NICSP240028 | No |
| July 2024 | Paper | Hassoun, A.E.R., Tanhua, T., Lips, I., Heslop, E., Petihakis, G. and Karstensen, J., 2024. The European Ocean Observing Community: urgent gaps and recommendations to implement during the UN Ocean Decade. <i>Frontiers in Marine Science</i> , 11, p.1394984. | | https://doi.org/10.3389/fmars.2024.1394984 | Yes |
| Feb 2024 | Paper | Demestre, M., Soto, S., Durán, R., Del Arco, J.A.G., Cabrito, A., Illa-Lopez, L., Maynou, F., Sánchez, P., García-de-Vinuesa, A. and Emelianov, M., 2024. Reconstruction of the Maërl | | https://doi.org/10.1016/j.scitotenv.2023.168752 | Yes |

| B. Other/non-peer reviewed types of publications (co-)authored in the quarter | | | | | |
|---|-----------------------------------|--|------|---|------------------------------|
| Date of publication | Type of publication | Full reference | ISBN | DOI | Is it open access? Yes/No |
| | | habitat to better understand its ecological integrity. <i>Science of the Total Environment</i> , 912, p.168752. | | | |
| 2024 | ICES Scientific Report - Workshop | Araúj, G., Basalo, A.R., Bastardie, F., Batts, L., Bitetto, I., Buhl-Mortensen, L., Carvalho, N., Córdón, C.F., D'Andrea, L., van Denderen, D. and Egekvist, J., 2024. Workshop to update and assess trade-offs between the impact of fisheries on seafloor habitats and their landings and economic performance (WKD6ASSESS). | | https://doi.org/10.17895/ices.pub.25567353 | Yes |
| Sept 2024 | Paper | Bartolini, A., Di Gennaro, V., Reas, V., Mascolo, R.A., La Notte, A., Capriolo, A. and Ferrini, S., 2024. Ecosystem accounting for marine-based tourism provided by <i>Posidonia oceanica</i> in Italy. <i>One Ecosystem</i> , 9, p.e129751. | | https://doi.org/10.3897/oneeco.9.e129751 | Yes |
| July 2024 | Paper | Cillari, T., Falautano, M., Maggio, T., Perzia, P., Sinopoli, M. and Castriota, L., 2024. Spatial distribution of the range-expanding species <i>Seriola fasciata</i> (Bloch, 1793) in Mediterranean Sea: From past to future. <i>Marine Environmental Research</i> , 199, p.106599. | | https://doi.org/10.1016/j.marenvres.2024.106599 | Yes |
| June 2024 | Chapter | Kanellopoulos Theodore, D., Georgios, P., Alexandra, P., Eleni, R., Ioannis, H., Catherine, T., Nikolaos, K., Sofia, R., Ioanna, V., Angeliki, M. | | https://doi.org/10.1007/698_2024_1087 | No |

| B. Other/non-peer reviewed types of publications (co-)authored in the quarter | | | | | |
|---|---------------------|--|------|-----|------------------------------|
| Date of publication | Type of publication | Full reference | ISBN | DOI | Is it open access? Yes/No |
| | | and Laura, B., 2024. The Semi-Enclosed Pagassitikos Gulf Under the Impact of Human Activities. | | | |

For a comprehensive overview of publications referring to/making use of EMODnet data and/or data products, please consult Google Scholar.

4. Monitoring indicators

| Comments on the progress indicators in the indicators spreadsheet | | |
|--|---|---|
| Progress indicator | Means of collecting figures | Comment |
| 1. Current status and coverage of total available thematic data A) Volume and coverage of available data | <i>Custom postgresql views and geoserver layers including vocabulary keyword tagging) with python scripting</i> | Two new point datasets have been uploaded to EMODnet Seabed Habitats in the greater North Sea region. |
| What is your opinion on the data coverage within EMODnet for your thematic? | | Overall coverage is considered good, and we continue working on filling gaps in areas where we don't have partners in the consortium. |
| B) Usage of data in this quarter | <i>Custom postgresql views and geoserver layers including vocabulary keyword tagging) with python scripting</i> | Downloads, WMS and WFS requests are higher than in the previous quarter which is positive although unusual over the summer period. Map visualisations are lower - no known reason for this. |
| 2. Current status and coverage of total number of data products A) Volume and coverage of available data products | <i>Custom postgresql views and geoserver layers including vocabulary keyword tagging) with python scripting</i> | Bulk upload of data sets in September including EFH maps and models and seabed habitat maps. New data from all sea regions apart from the Caspian sea. |
| B) Usage of data products in this quarter | <i>Custom postgresql views and geoserver layers including vocabulary keyword tagging) with python scripting</i> | Downloads, WMS and WFS are mostly much higher than in the previous quarter, but map visualisation appear to be lower. No known reasons for this. continued growth in the use of the relatively new essential fish habitat maps. |

| Comments on the progress indicators in the indicators spreadsheet | | |
|--|--------------------------------------|--|
| Progress indicator | Means of collecting figures | Comment |
| 3. Internal and external organisations supplying/approached to supply data and data products within this quarter | <i>Tracking tables in sharepoint</i> | A total of 52 data / data products were acquired in this reporting period. 2 of them was provided via EMODnet Ingestion portal while 53 directly by the project partners covering 9 sea basins from 6 countries and involving 13 different data owners |
| 5.1 Daily number of page views of EMODnet Thematic entry page | Europa Analytics | Daily number of page views higher than in the last month of previous quarter (June) but on average lower. |
| 5.2 Quarterly total number of visitors, page views, unique page views and percentage of returning visitors | Europa Analytics | Number of visitors, page views and unique page views down by 22–29%, percentage of returning visitors marginally higher. |

The monitoring numbers reported as part of the progress monitoring of EMODnet performance are collected through Europa Analytics, unless reported otherwise.

5. Annex: Other documentation attached