



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 (3)

Reporting Period: 01/04/2024 – 30/06/2024



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1. Highlights in this quarter

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

WP2 has had meetings with all the dataset providers and discussed possible issues with data deliveries and tasks required. Most of the datasets have been confirmed and will be delivered on time and the providers of datasets not yet acquired will be contacted to get status updates. The WP2 point data submission and check tools were updated and aligned with the new data template.

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

We took part in the EMODnet Geology partner meeting, where co-operation between the thematic lots and issues related to EUSeaMap (e.g. the future work on the seabed substrate layers) were discussed in the meeting plenary. A meeting/workshop is being planned later this year to further work together on improving EUSeaMap by developing the input substrate layers.

Work on the essential fish habitat (EFH) products has been begun by exploring the data and doing scenarios for the confidence scores. The work on the other composite products has also been started and an in-consortium meeting on developing these is planned for the autumn.

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

During this quarter we have evaluated the planned data submissions to see which, if any could be made available via machine-to-machine connections with a view to implementing these in Q3.

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

A bulk upload of data to the portal consisting of 20 new datasets, 19 essential fish habitat maps and one individual habitat map from survey was carried out in May. In addition, six seabed habitat point datasets have been uploaded to EMODnet Biology using the Integrated Publishing Toolkit. 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.

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. They have been delivered through JIRA in Q2 and are waiting to be implemented.

Possibilities to enhance the visibility and recognition of Data Providers on the CP were discussed in preparation for D4.04 (*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, due Q3-2024*).

Task 6: Ensure the involvement of regional sea conventions

Relevant ICES working groups have been contacted to inform them on what Seabed Habitats is working on during this phase and inviting them to express interest in co-operating on development of new composite products.

JNCC took part in OSPAR workshop where the goal was to gather all ongoing tasks regarding the protection of benthic environment. JNCC noted that EMODnet has a strong focus on supporting regional seas conventions (RSC) and that ESH have resources available to assist with RSCs with bringing the data together, standardizing it or developing products.

We participated in planning and arranging the HELCOM IC WS HABMAP 1-2024 (Informal Consultation Workshop on benthic habitat mapping). Syke and MI took part in the workshop, with Syke giving a presentation on EMODnet. We also took note of an interesting presentation by Poland on using EUSeaMap method for modelling EUNIS level 5 habitats.

MI participated in the UN Ocean Decade Conference in Barcelona in April, engaging with OSPAR and the Cartagena Convention in their respective side events, raising awareness of ESH activities and outputs, and the potential for development of new composite products. MI presented the first iteration of the Caribbean Sea habitat map to a Barbados government delegation to make them aware of activities and product development in the region in the hope of identifying possible data providers in the area.

MI attended the RSC Workshop co-ordinated and delivered by EMODnet Biology in April.

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

Several ESH partners contributed to the recently published European Marine Board (EMB) Future Science Brief “Marine habitat mapping” as members of EMB by providing expertise and e.g. data and maps using EMODnet data.

SBH partners taking part in EU Horizon project OBAMA-NEXT are working to streamline the data flow from the project to EMODnet, based on the EMODnet Guidelines for European project data submissions. In May we also took part in the MARCO-BOLO project workshop on the Seagrass EOVI.

We have been representing EMODnet in the recent Workshop on Progress in Measuring and Reporting Blue Carbon and the JPI Oceans Blue Carbon Knowledge HUB.

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 provided feedback to the central team from users to help improve the Product Catalogue. We have also finalised a summary layer demonstrating all the modelled data products available in Seabed Habitats. This layer has not been approved yet, but it would help address user feedback on difficulties in finding some of the data layers post centralisation.

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]	1	26/07/2025	To do		
D1.02 : Confidence layer for modified substrate data product published	1	26/09/2025	To do		
D1.03 : Tool to spatially simplify EUSeaMap	1	26/05/2025	To do		
D1.04 : Updated broad-scale seabed habitat map	1	26/09/2025	To do		
D1.05 : Confidence assessment for updated broad-scale seabed habitat map, in all considered classifications	1	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	2	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	2	26/08/2025	To do		
D2.03 : Updated and integrated templates for	2	26/11/2023	Delivered	26/11/2023	

habitat map data exchange formats					
D2.04 : Webinars, tutorials or other forms of training material on the EMODnet Seabed Habitats data submission process	2	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	2	26/08/2025	To do		
D2.06 : Controlled vocabulary lists for classification systems published on NERC Vocabulary Server, as required	2	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	2	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	2	26/08/2025	To do		
D3.01 : A list of products to be created or updated and product specifications (New)	3	26/03/2024	Delivered	26/03/2024	
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)	3	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)	3	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)	3	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)	3	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)	3	26/05/2025	To do		
D3.07 : Evaluation of EFH approaches to determine map suitability to combine into products useful for fisheries management and biodiversity conservation (Update and new)	3	26/05/2025	To do		
D3.08 : Create a harmonised map of potential VMEs and potential degraded habitats (New)	3	26/08/2025	To do		
D3.09 : Combined, harmonized data products showing the best evidence for extent and distribution of habitats defined in other	3	26/08/2025	To do		

classifications in all regions, with metadata, depending on stakeholder needs (New)					
D3.10 : An updated combined, harmonized data product showing the best evidence for the extent of biogenic substrate in all regions, with metadata (Update)	3	26/01/2025	To do		
D3.11 : Report detailing the construction of the Essential Ocean Variable data products (Update)	3	26/08/2025	To do		
D3.12 : Report detailing the construction of the biogenic habitat data product (Update)	3	26/05/2025	To do		
D3.13 : Report detailing the construction of the coastal wetlands habitats data product (Update)	3	26/05/2025	To do		
D3.14 : Report(s) detailing the construction of the data products defined by stakeholder needs (New)	3	26/09/2025	To do		
D3.15 : Report detailing the construction of the Essential Fish Habitat data products (New)	3	26/09/2025	To do		
D3.16 : Report detailing the construction of the harmonisation of Vulnerable Marine Ecosystems (VME) and other priority habitats (New)	3	26/09/2025	To do		
D4.01 : GeoServer OGC spatial web-services (WMS, WFS, WCS) and a GeoNetwork INSPIRE-compliant metadata instance	4	25/09/2023	Delivered	25/09/2023	
D4.02 : Access all unrestricted habitat ground-truthing data from the EMODnet Biology database via web services	4	24/09/2025	To do		
D4.03 : A publicly available list of all new data and	4	24/09/2024	To do		

products collected and created under WP1, WP2 & WP3 that have been published via EMODnet Seabed Habitats in year 1					
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.	4	24/09/2025	To do		
D4.05 : Direct link to services from the Regional Sea Conventions where feasible	4	24/09/2024	To do		
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 Member States to fulfil reporting obligations	5	26/09/2023 – 26/09/2025	To do		
D5.02 : Infographics illustrating the spatial distribution, resolution and availability of ESH product and data holdings	5	26/09/2024	To do		
D5.03 : Infographic on viewing, accessing and downloading ESH product and data holdings	5	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.	5	26/09/2023 – 26/09/2025	To do		
D5.05 : Use cases on the EMODnet Central Portal.	5	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)	5	26/09/2024	To do		
D6.01 : Progress reports to CINEA, DG MARE and EMODnet Secretariat	6	15th of Jan, Apr, Jul & Oct each year	Delivered	15/07/2024	
D6.02 : Interim report	6	26/09/2024	To do		

D6.03 : Final report	6	26/09/2025	To do		
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2. Identified issues: status and actions taken

[Provide an **overview of issues** identified by CINEA/ DG MARE/ Secretariat (Table A) in the past quarter - new as well as pending ones, the status of those issues, and actions taken to address them and/or roadmap with remaining actions planned to resolve the issues. In Table B, provide information about any issues and challenges identified by yourself.]

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. Our next steps are to instigate 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 (To Do) EMODnet lots to check if filter values are displayed in the preferred order	Pending	The central team have made changes in the way the values in the drop down filter (be it multi or single choice) are displayed. The outcome should be that the values are displayed in the same order as we requested them. Action on Seabed habitats to check the filters.	none			

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 a 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 a 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 a 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 a issue/suggestion that SBH made related to the functionality of the CP	none	
EM-916 (Bug) products catalogue without filter options	Pending	Central team to implement an update to correct the link on the Seabed Habitats page	none	
EM-936 (Task) EMODnet Seabed Habitats static content update	Resolved	Static content update merged with ticket EMODCOM-170, secretariat working on updating the ESH page on the CP.	none	10/06/2024
EMODCOM-170 (Task) Seabed Habitats static content update on the CP	Pending	Seabed Habitats CP Text and images have been provided in the JIRA ticket, pending action by secretariat	31/05/2024	
EM-943 (Task) Updated tools and guidance for Seabed Habitats	Resolved	Changes made and checked in early April 2024. Following tools and guidances updated: Tools: * Remove the Point data submission template - up to 500 points (xlsx) and Point data submission template - up to 1,000 points (xlsx) * Replace the Point data submission template - up to 10,000 points (xlsx) file with the attached Excel		12/04/2024

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
		<p>file:Point_data_entry_template_up_to_10000_records_Jan2024.xlsx and update the last modified date to be: January 2024</p> <ul style="list-style-type: none"> * Replace the Data provider agreement with the template_dataprovideragreement_v1_2.doc and update the last modified date to be Jan 2023 <p>Guidance</p> <ul style="list-style-type: none"> * Update the current guide for submitting habitat point data. The link text for this should read "Guidance on structuring classified habitat data using the Darwin Core Extended Measurement or Fact Extension" * Add the the ESH_DataExchangeFormats_v4_1.pdf using the text. Data Exchange Format guidance. Last modified March 2024 * Add the Data Preparation Guide for Point Datasets v1_2.pdf using the text: Guidance for preparing habitat point data for submission. Last modified September 2023. 		
EM-966 (Task) Seabed habitats: new layers for CP viewer	Pending	Three new layers have been prepared for upload in Central Portal. Two of the layers just need filters applied prior to going live, for the final layer we are waiting on the outcome of discussions with DG MARE/CINEA to see if this layer can be published.		
EM-972 (Bug) GEBCO 2022 error affecting EUSeaMap (via EMODnet DTM)	Pending	During the 2023 revision of EUSeaMap it was found out that an error in GEBCO 2022 affects the EMODnet DTM, causing classification errors in EUSeaMap. This was reported to Bathymetry and the view after the discussion was that this should be resolved by GEBCO.		
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	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		

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
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.		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.		

3. Communication assets

[In Table A, list peer reviewed publications directly (co-)authored by consortium and project partners in the reporting period. In Table B, list all non-peer reviewed publications (co-)authored. In all cases, indicate the type of publication, provide the full reference incl. title, volume and issue etc., and whether the publication is open or closed access.]

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	
June 2024	Paper	Predragovic, M., Assis, J., Sumaila, U. R., Gonçalves, J. M.S. , Cvitanovic, C., & Horta e Costa, B. (2024). Up to 80% of threatened and commercial species across European marine protected areas face novel climates under high emission scenario. <i>npj Ocean Sustainability</i> , 3(1), 32.		https://doi.org/10.1038/s44183-024-00068-4	Yes	
June 2024	Future Science Brief	Fraschetti, S., Strong, J., Buhl-Mortensen, L., Foglini, F., Gonçalves, J. M. S. , González-Irusta, J. M., Lillis, H. , Lindegarth, M., Martin, G., Menot, L., O’Keeffe, E. , Pascoal, A., Salomidi, M. , Schoening, T. (2024) Marine habitat mapping. Alexander, B., Rodriguez Perez, A., Kellett, P., Muñiz Piniella, A., Bayo Ruiz, F., Bairaktari, K., Heymans, J. J. [Eds.] Future Science Brief N°. 11 of the European Marine Board, Ostend, Belgium.		https://zenodo.org/records/11203128	Yes	

June 2024	Paper	Dzhembekova N, Zlateva I, Rubino F, Belmonte M, Doncheva V , Popov I, Moncheva S (2024) Spatial distribution models and biodiversity of phytoplankton cysts in the Black Sea. Nature Conservation 55: 269-296.	https://doi.org/10.3897/natureconservation.55.121181	Yes
May 2024	Paper	Monika Jadwiga Szynaka, Pedro Monteiro , Karim Erzini, Jorge M.S. Gonçalves , Aida Campos. Reducing invertebrate by-catch in a coastal fishery using a raised monofilament trammel net. Fisheries Research, Volume 276, 2024.	https://doi.org/10.1016/j.fishres.2024.107040	Yes
May 2024	Paper	Peiffer, Friederike & Lima, André & Henriques, Sofia & Pardal, Miguel & Martinho, Filipe & Gonçalves, Jorge & Gonçalves, Emanuel & Correia, Miguel & Silva, Goncalo. (2024). Habitat suitability of two flagship species, <i>Hippocampus hippocampus</i> and <i>Hippocampus guttulatus</i> , in the Atlantic coast of the Iberian Peninsula - implications for conservation. Global Ecology and Conservation.	https://doi.org/10.1016/j.gecco.2024.e02993	Yes
June 2024	Paper	Marçalo, Ana & Samel, Vighnesh & Carvalho, Flávia & Frade, Magda & Erzini, Karim & Gonçalves, Jorge . (2024). Evaluating dolphin interactions with bottom-set net fisheries off Southern Iberian Atlantic waters. Fisheries Research. 278. 107100.	https://doi.org/10.1016/j.fishres.2024.107100	Yes

May 2024	Paper	Martínez-Ramírez, L. , Bentes, L., Dias, A., Erzini, K., Gandra, M., Kraft, S., Winkler, A. C., & Abecasis, D. (2024). Tagging mortality in acoustic telemetry studies: Insights from a multispecies analysis. <i>Journal of Fish Biology</i> , 1–11.	https://doi.org/10.1111/jfb.15790	Yes
May 2024	Paper	Eger, A., Aguirre, J.D., Altamirano, M., Becky, T. et al. Correction to: The Kelp Forest Challenge: A collaborative global movement to protect and restore 4 million hectares of kelp forests. <i>J Appl Phycol</i> 36, 965–967 (2024).	https://doi.org/10.1007/s10811-024-03252-8	Yes
May 2024	Paper	Filbee-Dexter, K., Pessarrodona, A., Pedersen, M.F., Beckby, T. et al. Carbon export from seaweed forests to deep ocean sinks. <i>Nat. Geosci.</i> 17, 552–559 (2024).	https://doi.org/10.1038/s41561-024-01449-7	Yes
June 2024	Paper	Hayes, L., Lukić, I., Moy, S.R., Fagerli, C. W., Rinde, E., Christie, H. & Beckby, T. Effects of wave exposure and habitat fragmentation on growth and grazing of rocky shore seaweeds: a mesocosm experiment. <i>Mar Biol</i> 171, 145 (2024).	https://doi.org/10.1007/s00227-024-04456-9	Yes

A. 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	
April 2024	Report of Task 1.3 Seabed Habitat Condition Assessment in the UK EEZ	Sciberras, M., Marra, S., Morris, K., Kaiser, M., Matear, L. and Woodcock, K.A., Marine Spatial Planning Addressing Climate Effects (MSPACE) Report of Task 1.3 Seabed Habitat Condition Assessment in the UK EEZ.				Yes
May 2024	Proceedings Volume IMDIS 2024	Beja, J. , Delaney, C., & Collart, T. The EMODnet Central Portal: how federated webservices led to a centralisation success story.				Yes
April 2024	Proceedings Volume EGU 2024	Kotilainen, Aarno T., Mia M. Kotilainen, Sami Jokinen, Meri Sahiluoto, Joonas J. Virtasalo, and Anu M. Kaskela. Estuaries under		https://doi.org/10.5194/egusphere-egu24-11676		Yes

A. 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
		pressure–surveying the extreme shallow water environments. No. EGU24-11676. Copernicus Meetings, 2024.			

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

4. Monitoring indicators

[Refer to the standardised monitoring tool, i.e. Europa Analytics, to complete the indicators excel template, and provide a short explanation in the table below on the numbers and trends for each indicator when possible/applicable. Indicate clearly if monitoring was carried out using tools other than Europa Analytics.]

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	Custom PostgreSQL views and GeoServer layers including vocabulary keyword tagging) with python scripting	Six new point datasets have been uploaded via the new habitat point workflow to EMODnet biology including three new datasets in the Black Sea area.
What is your opinion on the data coverage within EMODnet for your thematic?	N/A	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	Custom GeoServer layers (including vocabulary keyword tagging), with python scripting, GeoServer server-side logging and data download logging	Downloads and WMS requests are much lower than in the previous quarter and map visualisations have remained fairly steady. The number of WFS requests is much higher perhaps because users are choosing to use these services rather than the download package.
2. Current status and coverage of total number of data products A) Volume and coverage of available data products	Custom PostgreSQL views and GeoServer layers including vocabulary keyword tagging) with python scripting	One new seabed habitat map, and 19 new essential fish habitat maps have been uploaded this quarter. Most of these new datasets are located in the Mediterranean Sea with one addition from the Baltic Sea region
B) Usage of data products in this quarter	Custom GeoServer layers (including vocabulary	Downloads are much lower than in the previous quarter for most sub-themes apart from the modelled maps. Map visualisations have remained fairly level and WMS requests have decreased. WFS requests have slightly decreased for some sub-themes but a large

Comments on the progress indicators in the indicators spreadsheet		
Progress indicator	Means of collecting figures	Comment
	keyword tagging), with python scripting, GeoServer server-side logging and data download logging	increase has been seen in the composite product and essential fish habitat map requests. In this case the WFS maybe be increased if users are choosing to utilise the WFS rather than the static downloads. It is good to see continued growth in the use of the relatively new essential fish habitat maps.
3. Internal and external organisations supplying/approached to supply data and data products within this quarter	N/A	A total of 53 data / data products were acquired in this reporting period. 1 of them was provided via EMODnet Ingestion portal while 52 directly by the project partners covering 9 sea basins from 6 countries and involving 13 different data owners. We are continuing discussions with HELCOM on how they could facilitate in bringing in data from the Baltic Sea.
5.1 Daily number of page views of EMODnet Thematic entry page	Europa Analytics	Number of visitors during peaks fairly similar to previous quarter except for June where 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 9-12%, percentage of returning visitors slightly lower.

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

[List in Annex if you wish to provide any additional information.]