EMODnet Thematic Lot n°3 – Physics

EASME/EMFF/2020/3.1.11/Lot4/SI2.838612

Start date of the project: 23/08/2021 - (24 months)

EMODnet Phase IV– Quarterly Progress Report

Reporting Period: 01/10/2021 – 31/12/2021

Contents

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1. Highlights in this quarter

Table 1. Milestones and Deliverables - EASME/EMFF/2020/3.1.11/Lot4/SI2.83861

Status of the Milestones and Deliverables listed in the workplan			
Milestone/Deliverable	Date due	Status (Delivered/Delayed)	If Delayed: reason for delay and expected delivery date
D1.1 Kick off Meeting	30/11/2021	8 November 2021	
D1.2 Annual assembly	30/11/2022		
D1.3 EMODnet SC	30/11/2021	8-10 September 2021	
D1.4 EMODnet TWG	30/11/2021	8-10 September 2021	
D1.5 EMODnet SC	31/05/2022		
D1.6 EMODnet TWG	31/05/2022		
D1.7 EMODnet SC	31/08/2022		
D1.8 EMODnet TWG	31/08/2022		
D1.9 EMODnet SC	30/11/2022		
D1.10 EMODnet TWG	30/11/2022		
D1.11 EMODnet plenary event	31/12/2021	8-9 November 2021	The EMOdnet Physics KOM was organized in two session, the first one was closed to core partner (D1.1) the second was a plenary with invited speech about previous and recent developments of the EMODnet Physics networks and collaborators
D1.12 EMODnet plenary event	30/06/2022		
D1.13 EMODnet plenary event	31/12/2022		
D1.14 EMODnet plenary event	30/06/2023		
D1.15 Quarterly report Q3.2021	15/10/2021	Delivered 15/10/2021	
D1.16 Quarterly report Q4.2021	15/01/2022	Delivered 15/01/2022	This Report
D1.17 Quarterly report Q1.2022	15/04/2022		
D1.18 Quarterly report Q2.2022	15/07/2022		
D1.19 Quarterly report Q3.2022	15/10/2022		
D1.20 Quarterly report Q4.2022	15/01/2023		
D1.21 Quarterly report Q1.2023	15/04/2023		
D1.22 Quarterly report Q2.2023	15/07/2023		

D1.23 Annual progress report	23/08/2022		
D1.24 Final progress report	23/08/2023		
D1.25 Handover note	23/08/2023		
D1.26 EMODnet Physics note for Annual Report 2021	31/01/2022		
D1.27 EMODnet Physics note for Annual Report 2022	31/01/2023		
D1.28 EMODnet Ingestion general assembly 2021	30/11/2021	21-22 September 2021	
D1.29 EMODnet Ingestion general assembly 2022	30/11/2022		
D1.30 Guideline on data ingestion procedures for new real time and near real time streams v.2022	31/08/2022		
D1.31 Guideline on data ingestion procedures for new real time and near real time streams v.2023	23/08/2023		
D1.32 Use cases 2021	31/12/2021	Status: (CMCC) delivered	Second in progress
D1.33 Use cases 2022	31/12/2022		
D1.34 Use cases 2023	23/08/2023		
D1.35 Contribution to central space with background information and EMODnet Physics content	28/02/2022		
D1.36 TGs - RSCs event attendance	31/12/2021	TG NOISE WS "towards EU thresholds for underwater noise", 13-14 Sept 2021	
D1.37 TGs - RSCs events sattendance	30/06/2022		
D1.38 TGs - RSCs events attendance	31/12/2022		
D1.39 TGs - RSCs events attendance	30/06/2023		
D2.1. Data Inventory with gap analysis v.2021	31/12/2021	Delayed	To be completed. Expected by end Feb2022
D2.2 Data Inventory with gap analysis v.2022	31/08/2022		
D2.3 Data Inventory with gap analysis v.2023	23/08/2023		
D2.4 EMODnet Physics Event/Workshop	31/12/2021	Delivered – (15/1/2022) - updates are described in the quarterly report Q4.2021 – Section 4	This Report
D2.5 EMODnet Physics Event/Workshop	30/06/2022		
D2.6 EMODnet Physics Event/Workshop	31/12/2022		

D2.7 EMODnet Physics Event/Workshop	30/04/2023		
D2.8 Report on th maintainace and update of the EMODnet Physics smart connectors v.2022	31/08/2022		
D2.9 Report on th maintainace and update of the EMODnet Physics smart connectors v.2023	23/08/2023		
D2.10 EMODnet Physics Handbook on data management	31/08/2022		
D2.11 Support to develop common strategy and guideline for adoption cloud technologies	23/08/2023		
D2.12 EMODnet Physics Metadata handbook and examples	31/08/2022		
D2.13 Report on dissemination system interfaces update v.2022	31/08/2022		
D2.14 Report on dissemination system interfaces update v.2023	23/08/2023		
D2.15 Updated list of EMODnet Physics products v.2021	31/12/2021	Delivered 15/1/2022	
D2.16 Updated list of EMODnet Physics products v.2022	31/08/2022		
D2.17 Updated list of EMODnet Physics products v.2023	23/08/2023		
D2.18 SSS v.2020	28/02/2022		
D2.19 SSS v.2021	28/02/2023		
D2.20 River Proxy V1.0	31/12/2021	Delayed	Expected by end Feb2022
D2.21 River Proxy V2.0	31/08/2022		
D2.22 River Proxy V3.0	23/08/2023		
D2.23 INS RVFL DB v.1.0	31/08/2022		
D2.24 TSM v.2021	28/02/2023		
D2.25 SLEV INS DB	31/12/2021	Delayed	Expected by end Feb2022
D2.26 SLEV REL TRENDS	31/08/2022		
D2.27 SLEV ABS TRENDS	31/08/2022		
D2.28 SLEV REL ANOM	31/08/2022		
D2.29 SLEV ATL ABS TREND	31/08/2022		
D2.30 RFVL v.1	28/02/2023		
D2.31 UWN ROI v.1.0	31/08/2022		
D2.32 WAVE INS DB+ NOWCAST v.2.0	28/02/2022		
D2.33 WIND INS DB+ NOWCAST v.2.0	28/02/2022		

D2.34 ICE SIC v.2.0	31/08/2022		
D2.35 TGs - RSCs event attendance	31/12/2021	19th TG NOISE: 26 October 2021	
D2.36 TGs - RSCs events sattendance	30/06/2022		
D2.37 TGs - RSCs events attendance	31/12/2022		
D2.38 TGs - RSCs events attendance	30/06/2023		
D3.1 Report on the SOS.SWE connected stations v.2021	30/11/2021	Delivered 15/01/2022	
D3.2 Report on the SOS.SWE connected stations v.2022	31/08/2022		
D3.3 Report on the SOS.SWE connected stations v.2023	23/08/2023		
D3.4 Handbook on procedure to set up SOS.SWE interoperability	23/08/2023		
D3.5 Report on new API v.2021	30/11/2021	Delayed	
D3.6 new APIs v.2022	31/08/2022		
D3.7 new APIs v.2023	23/08/2023		
D3.8 handbook to use EMODnet Physics APIs v.2021	30/11/2021	Delivered 15/1/2022	
D3.9 handbook to use EMODnet Physics APIs v.2022	31/08/2022		
D3.10 handbook to use EMODnet Physics APIs v.2023	23/08/2023		
D3.11 Phasing out of EMODnet Physics Landing page	28/02/2022		
D3.12 Phasing out of EMODnet Physics mapviewer	30/11/2021	In progress – status is reported in the quarterly report – Section 1	
D3.13 EMODnet Physics catalogue v.2021	30/11/2021	Delivered 15/1/2022	
D3.14 Maintenance and update of EMODnet Physics catalogue v.2022	31/08/2022		
D3.15 Maintenance and update of EMODnet Physics catalogue v.2023	23/08/2023		
D3.16 Monitoring tools	28/02/2022		

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

During the reporting period, we continued working on the system backend and cleaning and updating datasets and data packages in the system. This task is also a fundamental preparatory action towards Task 4. The following figure shows a simplified version of the workflow to access data, organize dataproducts in a common infrastructure and push results into a clean "production environment" that the central system can use to harvest and present Physics data-products.
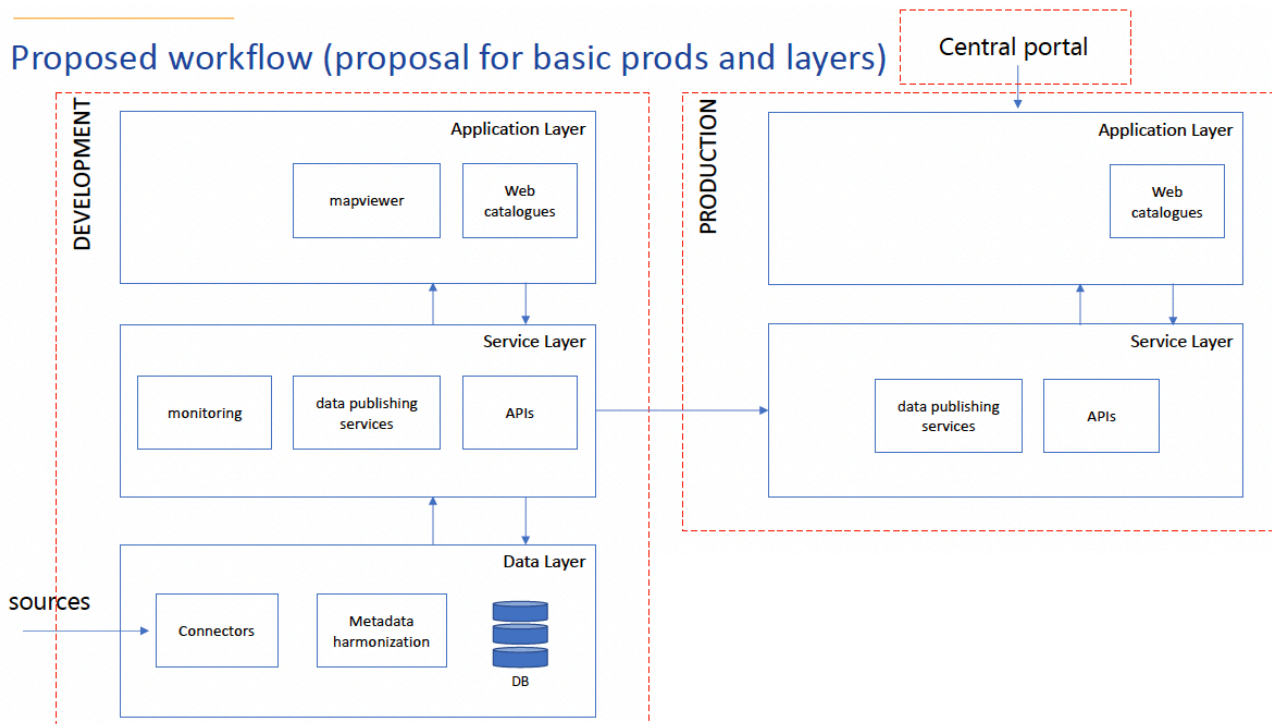

Figure 1. EMODnet Physics infrastructure and workflow towards the central system

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

The following products have been updated/published:
- **Salinity:**
    - ○ EP_MAP_PSAL_006 (https://products.emodnet-physics.eu/EP_MAP_PSAL_006/):
      Global mapped climatologies of salinity using the Data Interpolating Variational Analysis (DIVA) mapping method, based on the GLODAP v2.2016b dataset.
- **Temperature:**
    - ○ EP_MAP_TEMP_005 (https://products.emodnet-physics.eu/EP_MAP_TEMP_005/):
      Global mapped climatologies of temperature using the Data Interpolating Variational Analysis (DIVA) mapping method, based on the GLODAP v2.2016b dataset.
- **Carbon dioxide**
    - ○ EP_MAP_TCO2_001 (https://products.emodnet-physics.eu/EP_MAP_TCO2_001/):
      Global mapped climatologies of carbon dioxide using the Data Interpolating Variational Analysis (DIVA) mapping method, based on the GLODAP v2.2016b dataset.
- **pH**

- o EP_MAP_ALKY_001 (https://products.emodnet-physics.eu/EP_MAP_ALKY_001/):

  Global mapped climatologies of water pH using the Data Interpolating Variational Analysis (DIVA) mapping method, based on the GLODAP v2.2016b dataset.

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

As part of the M2M connection task, we continued the on-going activities to ingest and include ARICE project (https://www.arice.eu/) data and EuroFleets+ project data. Metadata and data models exchange are under a final review before proceeding with data integration.

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

Activities were kicked off with a meeting with the Central portal team (28/09/2021). Agreed actions (see Figure 1) are already implemented and the following endpoints are availble:

- https://prod-erddap.emodnet-physics.eu/erddap/info/index.html?page=1&itemsPerPage=1000
- https://prod-erddap.emodnet-physics.eu/ncWMS/
- https://prod-geoserver.emodnet-physics.eu/geoserver/web/wicket/bookmarkable/org.geoserver.web.demo.MapPreviewPage?1&filter=false
- https://prod-geonetwork.emodnet-physics.eu/geonetwork/srv/ita/catalog.search#/home

The PROD-ERDDAP and PROD-GEOSERVER are already esposing data and products, the PROD-GEONETWORK has yet to be configured. Deployments were presented to central team (meeting planned in December then postponed on 13/01/2022) that is now working on test and integration. Physics team is now reviewwing the new central viewer https://emodnet.development.ec.europa.eu/geoviewer-new/

Task 5. Contributing content to dedicated spaces in Central Portal

The first task will be the mapping of the static content to be ported under the central portal, activity has already started.

Task 6. Ensure the involvement of regional sea conventions

In line with the previous periods, we are going to follow the TG NOISE activities (external attender) and under the new contract ICES (core team partner) and CTN (subcontractor) will help ensuring the involvment of RSC. During the period the TG NOISE organized the workshop "Towards EU threshold values for underwater noise" to discuss on the TG Noise Deliverable 3, Assessment framework for EU Threshold values for continuous noise, that was then approved during the 19th TG NOISE meeting (26/10/2021).

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

Nothig to report for this specific task since the start of the new contract.

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

The subtask "deal with user feedback" goes together with task 7. Concerning the process to monitor performances, EMODnet Physics is implementing *matomo* for collecting views on the landing and map page. It uses logs to extract the traffic/requests/manual downloads/interaction with services. For manual downloads from the Mapviewer (www.emodnet-physics.eu/map) authentication is proposed for downloading data (older than 60 days) from coastal fixed stations and data products organized under CMEMS INSTAC. Moreover the new products and service monitoring service (graylog) is up and running.

Besides the help desk system (see task.7) the main interaction with users was during the Polar Data Forum when stakeholders confirmed the importance of having harmonized and simplified system to access data such as EMODnet Physics: the mapviewer provides the users with an eaasy tool to identify gaps.

Last but not least, during the period EMODnet Physics and ARICE project signed their MoU. (see attachments).

Task 9.   Maintain the existing thematic web portal for a maximum of six months from the start of the projects

Web portal maintainance will be provided untill the new central system is published.

2. Identified issues: status and actions taken

The following tables report pending actions from the previous report and newly-identified priority issues.

Table 2. Priority issues identified by CINEA/ DG MARE/ Secretariat

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-14/EM-87	Physics - Web Services MetadataUrl and DataUrl fields	In progress	Service check and update – continuous dialogue with secretariat/central portal tech team.	asap	
EM - 50	Products to be offered via OGC services	closed	Part of the Physics to central discussion. During the meetings we agreed to have a step wise approach and work on product (first) and on data (one theme per time, later)		03/01/2022
EM-140	INSPIRE quality Service requirements	In progress	TWG is working on this issue.	asap	
EM-145	The WMS service exceeds the 10-seconds response time required by INSPIRE	In progress	Keep working on this in collaboration with CP.	asap	
EM-210	LegendGraphics for HFR WMS	Pending	Mapproxy does not support the legend graphics as requested. A custom development is needed. It is not planned yet.	asap	
EM-296	Dashboard - Catalogue webpage tracking	closed	The endpoints to be monitored were updated		29/07/2021
EM-297	Links to EMODnet Physics dashboards	closed	Dashboards were developed and used for monitoring the system under phase 2 and 3.1. Monitoring specifications have been changed hence these dashboards are not		12/10/2021
EM-319	Content Inventory Physics	closed	Mapping of the EMODnet Physics static contents		15/11/2021
EM-338	Portal Editors	closed	Provided		29/11/2021
EM-346	Collect fields/forms used on Physics	Closed	Provided		29/09/2021
EM-354/EM-362	To report on number of downloads	closed	Provided		05/11/2021

| EM-382 | Physics Grafana spotted tracking some pages | pending | Some of the monitored endpoints are changed and are going to be changed because of the centralization process, the agreement is to monitor what is possible/available as internim solution. | | | 11 |
| EM-393 | Review the new CP mapviewer | pending | CP have to take over and follow up on provided comment | | | |

Table 3. Priority issues identified by Physics group

	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
EP7	Update the platforms page with the same technology and responsiveness implement for the mapviewer		This is part of Taks 9		

3. User feedback (Contact Us form, online chat & other communication means)

Table 4. User feedback

Overview of user feedback and/or requests received in this quarter							
Date	Organisation	Type of user feedback (e.g. technical, case study, etc.) and short description of the feedback received	Means of contact	Response time	Status of user query: resolved/pending	Measures taken to resolve the query	Status: if not (yet) resolved/pending, explain reason why and expected timeline
01/10/2021	Université du Littoral Côte d'Opale	request for help with data download	HD	0 days	Solved	Feedback by email.	
12/10/2021	CorPower Ocean	problem with dataset download	email	0 days	Solved	Feedback by email and server problem solved.	
12/10/2021	EnBW Energie Baden-Württemberg	request for help with data download	email	1 day	Solved	Feedback by email and server problem solved.	
14/10/2021	EuroGOOS	Arctic portal is down	email	0 days	Solved	Feedback by email.	
14/10/2021	Energinet	Problem with login	HD			Feedback by email.	
20/10/2021	Nautilus Energy	request for help with data download	email	1 day	Solved	Feedback by email.	
25/10/2021	Geoazur	issues with data download	HD	1 day	Solved	Feedback by email.	
26/10/2021	Norwegian University of Science and Technology	enquiry about wave data	HD	1 days	Solved	Feedback by email.	
09/11/2021	Deltares	login issue and data download enquiry	email	1 day	Solved	Feedback by email.	
10/11/2021	Bangor University	enquiry about tidal data	email	1 days	Solved	Feedback by email.	

22/11/2021	Institute of Geosciences Christian-Albrechts-Universität zu Kiel	data download enquiry	email	1 day	Solved	Feedback by email.	
26/11/2021	University of Genoa	wave data enquiry	email	1 day	Solved	Feedback by email.	
27/11/2021	Monitor My Ocean	Support to download data	HD	1 day	Solved	Feedback by email.	
18/12/2021	Private user	Support to download data	HD	1 day	Solved	Feedback by email.	

4. Meetings/events held/attended & planned

Table 5. Meetings/events held/attended

A. Meetings/events Organized and attended				
Date	Location	Type event (internal or external meeting, training/workshop)	Indicate if a ppt was given (yes/no + short description)	Meeting attended (A) / organised (O)	Short description and main results (# participants, agreements made, etc.)
7-8/09/2021	On line	EMODnet SC		A	
20-24/09/2021	On line	Polar Data forum		A	https://polar-data-forum.org/ - PDF is a place where polar data holder get together and make more use of data. EMODnet Physics is supporting both the Antarctic (SOOS) and Arctic community and the team was involved in some of the tech brainstorming workshops.
21-22/09/2021	On line	EMODnet Ingestion Annual Meeting		A	
28/09/2021	On line	Physics – Central Portal KOM		A	Technical meeting to review and plan actions towards the centralization of the systems.
6/10/2021	Online	EMODnet Physics River team meeting		O	Periodic meeting with the expert team to review and plan internal actions
8/10/2021	Online	BluePlanet Forum		A	https://www.blueplaneteconomy.it/ - the event discussed about the Blue Economy and the tools and the service that can support it.
8/10/2021	Online	UniGe DISTAV collaborations WS	Yes	A	The workshop was to present on the collaboration between the DISTAV (Univerity of Genova) and key partners such ETT. EMODnet (Physics, Ingestion, Chemistry) were central in the presentation.
12/10/2021	On line	AtlantOS Ocean Hour - All-Atlantic Ocean Data Space		A	Workshop to discuss about standards and interoperability, how to best use data, collaborations. Etc.

19/10/2021	On line	NAUTILOS General Assembly		A	Annual meeting of the H2020 NAUTILOS project
25/10/2021	On line	Glider School	Yes	A	Presentation about how EMODnet Physics and Ingestion deal and make available glider data (about 30 students)
26/10/2021	On line	Annual MONGOOS meeting		A	MONGOOS partners are key contributors to EMODnet Physics.
26/10/2021	Online	TG NOISE		A	Periodic TG NOISE technical meeting
26/10/2021	On line	EMODnet Central Portal	Yes	A	Technical meeting on migration to the new central portal
29/10/2021	On line	EMODnet Ingestion/SBM Offshore		A	It's a follow up meeting with SBM Offshore in order to identify possible sinergies to facilitate the ingestion of data collected at Offshore sites. The focus was on temperature, salinity and other basic physics data.
3/11/2021	On line	SOOS DMSC	Yes	A	SOOS map is powered by EMODnet Physics and with the presentation we updated the team on Centralization process, schedule and the planning to keep serving the SOOS community
8-9/11/2021	On line	EMODnet Physics 4 KOM	Yes	O	Annual meeting with Physics core and extended teams.
11/11/2021	online	VOTO Data		A	Technical meeting to interoperate with VOTO
16/11/2021	Online	EMODnet Chemistry	Yes	A	Presentation on the joint EMODnet Physics and Chemistry activities on River
18/11/2021	Online	New GESLA presentation		A	Presentation of the new GESLA – Sea Level Anomalies – product presentation. The product is of EMODnet Physics interest. The product can be included in the EMODnet Physics catalogue.
25/11/2021	On line	2nd EuroSea Anniversary Webinar		A	EMODnet is one of the main EuroSEA stakeholder.
29/11/2021	On line	EuroGOOS 2nd Integration Workshop		A	

30/11/2021	On line	SOOS DMSC		A	Periodic Data management SC meeting. We presented and reported on follow up actions since previous meeting.
13/12/2021	On line	EMODnet Chemistry full group KOM		A	
SUM				**O**	**Total # of meetings organised = 2**
SUM				**A**	**Total # of meetings attended = 21**

Table 6. Meetings/events planned

B. Meetings/events planned in the future				
Date	Location	Type event (meeting, training (workshop), etc.)	Meeting to be attended (A) / organised (O)	Short description and main expected outcomes
12/01/2022		EPhy-CP Technical meeting		
28/01/2022		EU Polar Data Management Team meeting		

5. Communication assets

[List all the relevant communication and dissemination products and assets you have developed since the start of the project phase (provide date) (e.g. brochures, videos, press releases, newsletters, blogs) and are planning to do. At the bottom of the table, provide a total number for every type of communication product you have developed (e.g. total # of press releases, etc.) or provide a summary from the actions on Twitter from (e.g. Twitter Analytics: number of Tweets and followers of Twitter account).]

Table 7. Comminunication products

A. Communication products				
Date	Communication material	Short description (of the material, title, …) of the asset	Main results	Name of event at which material was disseminated (if applicable)

Table 8. Planned communication

B. Planned communication products			
Date	Communication material	Short description (of the material, title, …) and/or link to the asset	Main results expected

Table 9. Publications

List of known publications using EMODnet data or data products				
Date	Type and name of journal, conference, ...	Publication title including DOI (if known)	Author(s)	Organisation(s)

simple search in google scholar shows more than hundreds documents between papers and projects deliverables using/citing EMODnet Physics. https://scholar.google.com/scholar?hl=it&as_sdt=0%2C5&q=EMODnet+Physics&btnG=

6. Monitoring indicators

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

Comments on the progress indicators in the excel template		
Progress indicator	Means of collecting figures	Comment
1. Current status and coverage of total available thematic data A) Volume and coverage of available data **If you don't use the provided sea-basin figures, please indicate why you do not use them, as from when, and what do you use instead and why?**		EMODnet Physics input data is sparse and for this indicator we consider the "platform" as the "unit" of monitoring assessment. A platform is a logical entity that hosts data, where data maybe a single dataset (e.g. a profile in case of CTD), a timeseries (e.g. sea level station), a series of profiles (e.g. ARGO). For indicator 1.A we report on the % variation of the number of platforms for the given basin. For this indicator we are not using proposed figures (i.e. areas in Km^2 - line 45): are we are dealing with georeferred data and we need to use to bounding box shapes (to note data Atlantic is covering from north to south from Europe-Africa to America). For indicator 1.B the unit of download is measured in platforms (in coherence with indicator 1.A) while the number of downloads are measured in "requests". A request may be for a single dataset (e.g. 1 CTD) as well as a full time series (e.g. daily data for past XX years). For ice data, EMODnet Physics is integrating a satellite derived product covering the whole Arctic and Antarctic areas. This product can be only downloaded via WMS. The template was slightly modified to facilitate the computation of the %variation for the reporting period.
B) Usage of data in this quarter		The new system to monitor and report the volume of downloaded data is monitoring all the EMODnet Physics delivery channels but the mapviewer which, for the download, rely on the ERDDAP. As reported in 2B the overall amount of downloaded data from ERDDAP is about 144 GB. This period we recorded a very limited downloads from the mapviewer, about 0,02% of the ERDDAP+map manual download (2B col F), if we assign to the map download 0,02% of the downloaded volume of data (from ERDDAP), we can

		estimate the total volume downloaded per themes (1B col D). Concerning the use of the interfaces: ERDDAP is the most used. The use of WMS/WFS layers (GeoServer) is tracked and (only) reported under 2B.
2. Current status and coverage of total number of data products A) Volume and coverage of available data products **If you don't use the provided sea-basin figures, please indicate why you do not use them, as from when, and what do you use instead and why?**		EMODnet Physics organizes data and products together threfore the volume of data for theme is the same as 1A (but the them ice). Apart from the European Under Water Noise Register and the TSM that only covering Europe (100% of the availble information) the other products offer global coverage. As reported two SOCAT derived products were made available (EP_MAP_TCO2_001 and EP_MAP_ALKY_001)
B) Usage of data products in this quarter		The mapviewer and the products pages accessible under the "Products" section are monitored in terms of visits (by matomo). This makes also possible to understand the interactions of the users and the products theme. ERDDAP is monitored both in terms of visit to the erddap landing page (matomo) and in terms of transactions (downloads - by logs). THREDDS and GeoSERVER are both monitored in terms of logs. We record a quite good use of the services. During the period we recorded a very little use of the EP_MAP_WIND_001 that is usually the most used product and we are going to investigate if there is a problem in the monitoring tool (very likely) or a real little use.
3. Organisations supplying/approached to supply data and data products within this quarter		The report is covering the summer time and there was any specific supplyer approaching action.
4. Online 'Web' interfaces to access or view data		Web Services are organized per item-interface to facilitate the tracking of their use. ERDDAP, THREDDS, web APIs, Widgets, GeoServer are providing data and products without any authentication or restriction. Some of the data that are presented on the mapviewer require authentication (e.g. coastal data from European istitution - data older than 60 days). All linked datasets are unrestricted.
5. Statistics on information volunteered through download forms		During the period we collected data on 52 new users. It is important to remember that the number of users here reported is only a limited number of the EMODnet Physics users and the form is asked to be filled only to users accessing for the first time to data that requires authentication (i.e. coastal data older than 60 days), and that it is on voluntary base (the user can skip the registration).The majority of EMODnet Physics data are

		downloadable without any authentication. Academia represents the majority about 60% in the period, the users from business/private is stable (around 15%), then Gov (about 15%) and others the remaining part. (Note: Cyprus was not in the Country list)
6. Published use cases		Use cases are providing examples of how EMODnet Physics data can be used for both private and public downstream applications. The most viewed are the two from industry (DHI and fishing vessels) and the two on the collaboration between EMODnet and CMEMS.
8.1. Technical monitoring		System is stable (uptime).Lately we are recording a slower reaction of the system (last response time). We will investigate and fix. Considering that the new "prod-env" was deployed to serve the CP, we suggest to start monitoring these endpoints (instead of the current ones that are going to be downgraded to a development-env hence only for internal use)
8.2. Portal user-friendliness (Visual harmonization score)		Status quo. Waiting for the migration and dismiss of the landing page, any of the "harmonization" fixes are on hold.
9. Visibility & Analytics for web pages		EMODnet Physics mapviewer is by far the most used interface with an steady trend. Catalogue is also quite well consumed. Charts are missing some data because, some endpoints were changed and the system was not able to distinct by (these) pages. In collaboration with the CP team we are working to fix it (https://jira.emodnet.eu/browse/EM-382)
10. Visibility & Analytics for web sections		Same comments as for sect.9: the tracking system was not able to track some pages stats, anyhow we can confir a satus quo.
11. Average visit duration for web pages		Same comments as for sect.9 and 10

The monitoring numbers reported as part of the progress monitoring of EMODnet performance are collected through Matomo. In some cases, numbers from other monitoring systems may also be reported (e.g. Awstats, Google Analytics), and if so, must be reported in the table above. Each system uses different technical approaches and therefore has its strengths and shortcomings. Therefore, results are indicative and care should be taken when interpreting absolute numbers or comparing results from different tools. It is often more sensible to consider trends over time collected by the same monitoring tool.

7. Annex: Other documentation attached

- D2.15 Updated list of EMODnet Physics products v.2021.xlsx
- D3.13 EMODnet Physics Catalogue v.2021
- 211015 Glider School 2021_Agenda_v3.pdf
- MoU_ARICE_2021_2.0.pdf