



EMODnet



European Marine
Observation and
Data Network

EMODnet Thematic Lot n° I - Biology

EASME/EMFF/2022/3.5.2/Lot V/Sl2.895681

Start date of the project: 10/05/2025 (24 months)

Operational Phase

Phase V extension kick off meeting [D1.4.1]



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Document info

Title (and reference)	D1.4.1 Phase V extension kick off meeting
WP title (and reference number)	WP1 Coordination
Task (and reference number)	Task 8: Monitor quality/performance and deal with user feedback
Authors [affiliation]	Joana Beja (VLIZ), Leen Vandepitte (VLIZ), Ruben Perez Perez (VLIZ), Benjamin Weigel (INRAE), Marina Lipizer (OGS), Bart Vanhoorne (VLIZ)
Dissemination level	Public
Submission date	2025-06-03
Deliverable due date	2025-06-13

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Phase V extension meeting

The kick off meeting for the EMODnet Biology Phase V extension period took place in Carthage, Tunisia on Tuesday, May 13th 2025. The hybrid meeting was hosted by the Institut National des Sciences et Technologies de la Mer (INSTM) and counted with about 19 partners attending in presence and another 11 online.

The consortium was represented by at least one person per organisation, which contributed to fruitful and varied discussions. The sections that follow summarise the agenda and WP presentations. A few consortium members were not available to attend online or on site, the colleagues were from the British Oceanographic Oceanography centre (BODC), BUP, International Ocean Data Exchanged (IODE-UNESCO) and Institut supérieur de l'électronique et du numérique (ISEN).

1 Participants

The list of participants that attended the meeting is included in the table below:

Name	Organisation
Joana Beja	Flanders Marine Institute (VLIZ)
Leen Vandepitte	Flanders Marine Institute (VLIZ)
Ruben Perez Perez	Flanders Marine Institute (VLIZ)
Bart Vanhoorne	Flanders Marine Institute (VLIZ)
Benjamin Weigel	Institut National de Recherche pour l'Agriculture, L'Alimentation et l'Environnement (INRAE)
Marina Lipizer	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Trieste (OGS)
Dimitra Mavraki	Hellenic Centre for Marine Research (HCMR)
Ioannis Rallis	Hellenic Centre for Marine Research (HCMR)
Carlos Pinto	International Council for Exploration of the Sea (ICES)
Maria Makri	International Council for Exploration of the Sea (ICES)
Alejandro Isla	Instituto Español de Oceanografía (IEO)
Elvira Ramos	Instituto de Hidráulica Ambiental de la Universidad de Cantabria (IH Cantabria)
Jose Antonio Juanes De La Peña	Instituto de Hidráulica Ambiental de la Universidad de Cantabria (IH Cantabria)
Felien Festjens	Institute for Agricultural and Fisheries Research (ILVO)
Arnfinn Morvik	Havforskningsinstituttet Institute of Marine Research (IMR)
Chloe Figueroa	Marine Biological Association (MBA)
Peter Tjisse	Marine Information Service (MARIS)
Oana Vlas	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)

Laura Boicenco	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Astrid Wittmann	Pangaea- University of Bremen
Willem Stolte	Stichting Deltares
Tom Webb	University of Sheffield
Anders Torstensson	Swedish Meteorological and Hydrological Institute (SMHI)
Mikael Hedblom	Swedish Meteorological and Hydrological Institute (SMHI)
Henrik Nygard	Suomen ympäristökeskus - Finnish Environment Institute (SYKE)
Sirpa Lehtinen	Suomen ympäristökeskus - Finnish Environment Institute (SYKE)
Charles Troupin	Université Liège
Karline Soetart	Royal Netherlands Institute for Sea Research (NIOZ)
Jonas Rømer	Aarhus University
Jordi Ribera	Catalan Institute of Research for the Governance of the Sea (ICATMAR)
Josean Fernandes	Centro de Investigación Marina y Alimentaria (AZTI)



Figure 1: Photos of the meeting participants

2 Agenda

The meeting took place over two days, at NIMRD in Constanta. All Work Package leads had a 30-minute slot to present the WP objectives, expectations, deliverables and deadlines. There were various slots for Q&A from the participants and also a 1.5h slot for WP breakouts and well as a report on the status of the work by the various partners. The agenda is included in the table below:

Time	What
10:00-11:00	Visit to Museum (kindly offered by INSTM)
11:00-11:20	WP1
11:20-11:30	Q&A
11:30-13:00	WP breakout groups
13:00-14:00	Lunch
14:00-15:00	WP breakout groups
15:00-15:30	WP2 reporting
15:30-16:00	Coffee break /group photo
16:00-16:30	WP3 reporting
16:30-17:00	WP4 reporting
17:00-17:30	WP5 reporting
17:30-17:50	Q&A
17:50-18:00	Close meeting

3 Main Topics discussed

The main topics discussed relate to an efficient implementation of the workplan and are summarised below:

- Publication automation and autonomy: Although currently many of the steps to transform, quality control, publish and update datasets are automated, there is still manual intervention needed to connect those steps to each other. A way forward to connect them was proposed and agreed on, involving the commitment from the consortium members where needed and possible, aligning more closely with OBIS and GBIF.

4 Work Package Presentations



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EMODnet Biology extension meeting

WP1 status update

Joana Beja, VLIZ

13 May 2025 (Carthage, Tunisia)



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WP1 Objectives



- General project coordination and supervision
- Budget Management
- Responsibility to deliver the reporting deliverables to the Commission
- Organisation of project meetings
- Liaise with external organisations on behalf of the project consortium
- Operate the helpdesk

WP1 Deliverables

- D1.1.1 Quarterly Progress reports

- ☐ 15 Jul 2025
- ☐ 15 Oct 2025
- ☐ 15 Jan 2026
- ☐ 15 Apr 2026
- ☐ 15 Jul 2026
- ☐ 15 Oct 2026
- ☐ 15 Jan 2027
- ☐ 15 Apr 2027
- ☐ 15 Jul 2027

- D1.1.2 Interim report 10 May 2026




- D1.1.3 Final Report 10 May 2027



WP1 Deliverables

- D1.2.1 Update of EMODnet Biology data products via the EMODnet CP catalogue
 - ☐ 10 May 2026
 - ☐ 10 May 2027
- D1.3.1 Monitoring user feedback via EMODnet JIRA
- D1.3.2 Operation of the EMODnet CP helpdesk
- D1.4.1 Minutes from the three project meetings (kick off, annual and final)
 - ☐ 13 Jun 2025
 - ☐ 10 Jun 2026
 - ☐ 10 Jun 2027
- D1.5.1 Participation in the EMODnet Steering Committee meetings
- D1.5.2 Participation in the EMODnet Open Conference (Nov 2025)
- D1.6.1 Appropriate mechanisms and guidelines for handover 10 May 2027

WP1 Partners

Organisation	WP	Who	Logo
VLIZ	1	Joana Beja	 VLIZ pioneer in marine science
	2	Leen Vandepitte/Ruben Perez Perez	
	5	Bart Vanhoorne	
INRAE	3	Benjamin Weigel	
OGS	4	Marina Lipizer	 OGS National Institute of Oceanography and Applied Geophysics

Payments

- Last payment is done upon approval of the Final Report
- VLIZ will send you an email when you can submit your invoices.
This will likely happen in September
- CINEA must approve submitted documents and pay within 60 days of report submission.
If CINEA has remarks, they will send them to VLIZ and the time limit for payment gets suspended. VLIZ has 30 days to make amendments or submit additional information or new report version. CINEA reviews and gives approval within remaining time (60 - x days)
- Non-compliance with proposed work/contract might result in payment being suspended or decreased



Photo by [Diane Helentjaris](#) on [Unsplash](#)

EMODnet Biology information

Where to find published documents

- Reports: <https://emodnet.ec.europa.eu/en/reports>
 - select Biology in the EMODnet component and interim, final, quarterly in the Publication type
- Deliverables: <https://emodnet.ec.europa.eu/en/reports>
 - select Biology in the EMODnet component and the Deliverables in the Publication type
- Use cases: <https://emodnet.ec.europa.eu/en/use-cases>
 - select Biology in the EMODnet component
- Informative material
- Static page: <https://emodnet.ec.europa.eu/en/biology>



Other contributions to EMODnet Biology activities

Requested from consortium



- Please provide your input for published publications in the project's Google document 'EMODnet Biology Reporting-Partners Input'
https://docs.google.com/document/d/1IGCcl0NZxgyvMDnJPLRZTRbGWR_mtxoev3Yn4UFlVvs/edit?usp=drive_link
- Organising Workshops/Training? We can boost the outreach
- Attending Events/Meetings wearing the EMODnet Biology hat -> information can be added to project's Google Drive document 'Meetings/Events attended/held'
<https://docs.google.com/document/d/1K4h7i5-GJqFXc5Il0rjwMvrUD45Ws5M2vE6tcmsIS8E/edit?usp=sharing>
(until end of May 2026)

WP1 Status Update

- Phase V ended on May 9th, extension period started on May 10th and runs until May 9th 2027
- Contracts are being drafted and will be sent
- Interested in receiving key EMODnet information? Sign up via <https://ec.europa.eu/eusurvey/runner/EMODnetConsentForm>
- EMODnet Vision 2035 Drafting Group (EMODnet-VDG)
 - Not yet presented publicly
- EMODnet Jamboree and Open Conference
 - Week of November 24th
 - Brussels



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EMODnet Biology annual meeting

WP2 extension status update

Ruben Perez Perez, Flanders Marine Institute
Leen Vandepitte, Flanders Marine Institute

13 May 2025 (Carthage, Tunisia)



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WP2 Deliverables

#	Description	Due	Responsible
D2.1.1	Maintenance of adequate mechanisms to ensure data are interoperable	M0-M24	VLIZ
D2.1.2	Report on the standardisation and integration of datasets published during the Phase	M24	VLIZ
D.2.2.1	Summary on consortium data flows	M6	VLIZ
D2.3.1	Data training workshop for Black Sea organisations.	M18	VLIZ
D2.3.2	Report on the availability of data following the Black Sea workshop	M24+6	VLIZ
D2.4.1	Updating data access tutorials and guidelines	M0-M24	VLIZ
D2.4.2	Updating quality control tool	M0-M24	VLIZ

Data flows

- **Automation** (from source to DwC-A URL)
- **Publication autonomy**
- **WP2 delivery requirements**

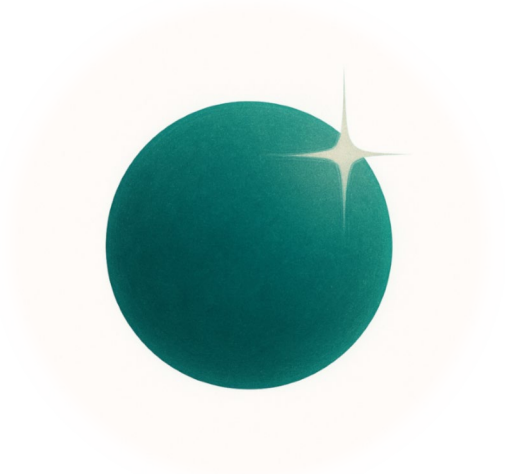
Feedback on Collaboration Framework

- **Data Laundry Q/A sessions**
- **Microsoft Team channels**

WP2 Break out

Data flows

- **Automation** (from source to DwC-A URL)



Static datasets



Growing datasets

* Automation needed

Data flows

- Publication autonomy

GBIF Publishers

- Choose existing Publisher
- Create your own Publisher

IPT management

- Choose a Production IPT
- VLIZ will authorize a Prod IPT for data providers without registration rights

GBIF Registry API

- Can be integrated in an automated pipeline
- Needs a DwC-A endpoint URL as input

OTN IPT scripts

- Python code to create and update IPT resources

Data flows

- WP2 delivery requirements

Budget allocated

- Based on quantity, quality and type of data
 - Biogeographic data gaps
 - KPI: 15% occurrences increase in each phase

Quantity Primary Data sheet

- Is a consortium Deliverable
- Failure to deliver affects budget allocated
- Replacing dataset is allowed

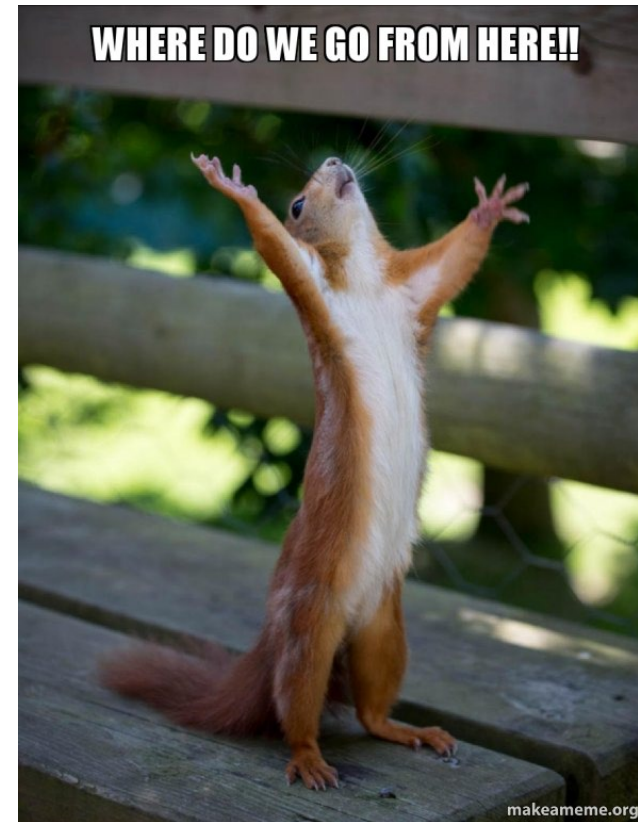


WP2 Break out

Feedback on Collaboration Framework

- Data Laundry Q/A sessions

- Microsoft Team channels





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EMODnet Biology annual meeting

WP3 status update Phase V continuation

Benjamin Weigel



12-13 May 2025 (Carthage, Tunisia)



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WP3 Deliverables

WP3- Data products	T2: Construct products from one or more data sources that provide users with information about the distribution and quality of parameters in time and space	T2.1 Guidelines for publication of external data products	M6	INRAE	VLIZ, AZTI, Deltares, IH Cantabria, NIOZ, SMHI, ULiège, U Sheffield
		T2.2 Quarterly community calls	M3-M24	INRAE	VLIZ, AZTI, Deltares, IH Cantabria, NIOZ, SMHI, ULiège, U Sheffield
		T2.3 Liaison with external entities targeting seabird and cetacean migration outputs	M0-M24	INRAE	VLIZ, AZTI, Deltares, IH Cantabria, NIOZ, SMHI, ULiège, U Sheffield
		T2.4 Data product creation	M0-M24	INRAE	VLIZ, AZTI, Deltares, IH Cantabria, NIOZ, SMHI, ULiège, U Sheffield

WP3 Deliverables

To ensure timely submission of deliverables

New requirements:

- Product development time-line: to be submitted around the first community call
- Mid-term evaluation of product development to ensure payment

New-contract likely to include a section specifying that submissions after December 2026 result in breach of contract and therefore no payment

WP3 Objectives

- **Maximize uptake of existing and new data products by end-users**
 - raising awareness of existing products
 - provide training materials in form of tutorials to manipulate and visualize EMODnet products using the existing R packages
- **Products targeting species migration routes**
 - identify and contact experts and relevant stakeholders
 - assessing data sources of existing external products and indicators and the possibility of hosting these external products in EMODnet Biology
 - Liaison with external entities and experts
- **Continue creating distribution maps**
 - **Data products targeting groups of species, as well as presence/absence maps, both of which can be queried, subset and downloaded via the EMODnet Central Portal viewer**
 - **Ensure relevance of products for RSC**
- **Creating internal guidelines for external product publication relevance**

2.1 Guidelines for publication of external data products

Relevance scoring procedure based on:

- (Under represented) taxa
- Number of species
- Geographic extent
- Temporal extent
- RSC relevance

First draft to be produced by and discussed at the next community call

WP3 Status Update

Preliminarily planned products (1)

- Utilizing Bfiat, producing a map layer of bottom trawl fishing impact on the benthos, in terms of density, and ecosystem functioning
- Distribution map of the invasive macroalgae *Rugulopteryx okamurae* across Europe, both in the present and under future climate change scenarios (CMIP6, IPCC).
- Distribution maps for all European marine species using minimal constraints (depth, distance from coast)
- Interpolated species-specific maps of cyanobacterial distribution in the Baltic Sea (DIVAnd)

WP3 Status Update

Preliminarily planned products (2)

- Update habitat suitability product (reef forming species) with two new key species and updated scenarios
- Using DIVAnd for Continuous Plankton Recorder (CPR) data to map relevant taxa or species groups (e.g., large copepods, small copepods, dinoflagellates).
- Use DIVAnd to map marine mammal distributions (depending on available data)
- New runs with size-spectrum species-based Dynamic Bioclimate Envelope Model (SS-DBEM) for 20 fish species in the OSPAR region under two climate scenarios
- Tutorials for EMODnet R packages

WP3 Status Update

Aims and initiatives

- **All data products with associated DOI**
- **As standard practice for future products we aim to adopt the CF Standard Names**
 - Improves Metadata
 - Beneficial for EDITO infrastructure
 - Improves our products and what we expose

Cross-thematic-lot products

During the EMODnet Jamboree 2023 initiatives have started to create cross-lot products

In preparation

Biology and Seafloor habitat lots

- A product that matches European habitats map to the benthos presence/absence product.
- Enables us to produce species lists for each individual habitat polygon, and summaries of species for different habitat types



Ongoing planning for next phase

Biology and Geology lots

Initial ideas and possibilities

- Product relating **biodiversity** to **geodiversity** within the same areas
- Product that relates benthic species with information on substrate fractions revealing species-specific substrate preferences

WP3 Partners



Benjamin Weigel



Joana Beja

Salvador Fernandez



IH cantabria
INSTITUTO DE HIDRÁULICA AMBIENTAL
UNIVERSIDAD DE CANTABRIA

Elvira Ramos Manzanos



Anders Torstensson



OGS

Marina Lipizer



**Royal Netherlands Institute
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Karline Soetaert



**University of
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Tom Webb

*Anna Krystalli
Maëlle Salmon*



Deltares

Willem Stolte

Luuk van der Heijden



Charles Troupin

Alexander Barth



MEMBER OF
BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

*Josean Fernandes
Mireia Valle*



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WP4 Next phase (2025-2027)

WP4

13 May 2025 (Carthage, Tunisia)



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□ Partners



ILVO

3



WP4 Objectives, tasks & actions

❖ **WP Objectives:** to promote EMODnet Biology data (WP2), products (WP3) and services (WP5) and engage relevant actors (e.g. RSC) and contribute to implementation of EU legislation

❖ WP Tasks

- ☐ Task 5: Contributing static content to dedicated spaces in the Central Portal
- ☐ **Task 6: Ensure the involvement of Regional Sea Conventions RSC**
- ☐ **Task 7: Contribute to the implementation of the EU legislation and broader initiatives for open data**

Proposed deliverables and responsibilities

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

Internal deadline:
3 weeks earlier

Deliverable	Responsible partner	Participants:	Timeline	Deadline
4.1 Update connectivity maps of new partners	MBA	all EMODnet Biology partners	M6	01/11/2025
4.2 Publication of four Use Cases	MBA	all EMODnet Biology partners	M6, M12, M18, M24	
4.3 Publication of news	NIMRD	all EMODnet Biology partners	M1-24	all year
4.4 Update Biology static page	VLIZ		M6	01/11/2025

Proposed deliverables and responsibilities

☐ **Task 6: Ensure the involvement of Regional Sea Conventions RSC**

Internal deadline:
3 weeks earlier

Deliverable	Responsible partner	Participants:	Timeline	Deadline
4.5 Inventory of biodiversity data in ODIMS-OSPAR	ILVO		M12	01/05/2026
4.6 Consolidation of dialogue between EMODnet and RSC	SYKE, ILVO, OGS, NIMRD		M24	01/05/2027

- To do before 4.6:
- ☐ Update Stakeholder inventory
 - ☐ Define more clearly needs from RSC and EMODnet «offer»
 - ☐ Common EMODnet presentantion/poster

Proposed deliverables and responsibilities

Internal deadline:
3 weeks earlier

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

Deliverable	Responsible partner	Participants:	Timeline	Deadline
4.7 Questionnaire on data availability in CINEA	VLIZ		M12	01/05/2026
4.8 Inventory of marine data in CINEA (LIFE programme)	VLIZ		M24	01/05/2027
4.9 Inventory of marine biological data available on other repositories	NIMRD & MBA		M18	01/10/2026
4.10 Online workshop for EU funded projects	ILVO & SYKE		M24	01/05/2027
4.11 Participation in TG DATA meetings	VLIZ		M1-24	
4.12 Report on the activities to support for EU Member States regarding their reporting obligations	VLIZ		M24	01/05/2027

In addition (not formalized as deliverable):

- Participation with presentation or poster on EMODnet Biology to at least 1 national event
- Opportunity: 7th Marine Biodiversity Conference (11.2026)

Inputs from WP3:

- Identify data and products to be presented as «champions»
- For which target?: RSC (?),...?

Next step:

WP4 quarterly meeting before Coordination meeting

Task 6: Ensure the involvement of Regional Sea Conventions

RSC – SWOT analysis

Strengths

- Consolidated connection with some RSC
- Better awareness of EMODnet

Opportunity

- Task to be consolidated in the next phase
- Next EMODnet Open Conference as a new opportunity to engage RSCs

Weakness

- Low participation to surveys
- Weak follow-up activities close to first engagement
- Not clear needs from RSC
- Not clear what EMODnet offers to RSC

Threats

- Change in RSC contact persons which requires establishment of connections (*ab initio*)
- Limited (no?) resources/commitment on RSC side



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EMODnet Biology Phase V (extension) kick-off

WP5 extension plan

Bart Vanhoorne (VLIZ)

12-13 May 2025 (Carthago, Tunisia)



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WP5 extension – possible NEW actions

- ⦿ **Expand semantic web** alignment
 - ⦿ Develop validators & best practices
 - ⦿ Make DwC-A/EML truly Linked Open Data, automate generation/mapping via AI
 - ⦿ Add LDES/LOD to SeaDataNet CSR & CDI
- ⦿ Revise EurOBIS **QC procedures** (codebase) to have all technical & content checks managed in one single place (not dispersed over many locations/scripts)
- ⦿ Redesign the **EurOBIS ERDDAP** to include all datasets & types
- ⦿ **Literature tracking** service, ideally via DOI, Google Scholar approach GBIF (<https://www.gbif.org/literature-tracking>). Already being developed within VLIZ
- ⦿ Allow for quick **incremental updates** per dataset (instead of entire EurOBIS)
 - ⦿ Possible plan towards **GBIF unified common model**

WP5 extension – classic actions/deliverables

- ⦿ Maintain & **upgrade OGC stack** & keep it operational
- ⦿ New **API endpoints & viewer options** for new data types
- ⦿ **Client packages** (R, Python) to access data
- ⦿ New **microservices technologies** i.e. Docker, pipelines, CI/CD
- ⦿ Improve automated metadata **synchronization** (FAIR, INSPIRE, ...)

WP5 extension - proposed list of deliverables

WP5- Technical Infrastructure	T3: develop a complete and robust machine to machine (M2M) interface to transfer data and products in bulk, which is easily accessible for other machines and initiatives	T4.1 Term Label Translation Management System	M16
		T4.2 Handbook for semantic annotations of DWCa into the Marine Science Backbone	M13
		T4.3 Term Label Translation Management Status Report	M24
		T4.4 Report on Semantic Enhanced BackBone	M24
		T4.5 Report on AI Investigation to semantic annotation of DWCa sets	M24
		T4.6 Operational web services	M0-M24
		T4.7 Technology stack upgrades	M0-M24
		T4.8 Technical maintenance of procedures for ingestion of data from the data providers	M0-M24
	T4: Contribute data, data products and content to a central portal that allows users to find, view and download data and data products	T5.1 Synchronisation of all data and data products metadata to the EMODnet CP catalogue (GeoNetwork)	M0-M24
		T5.2 All data and products available through the EMODnet CP	M2-M24
		T5.4 Maintenance and development of API used to query EMODnet Biology layers available via the EMODnet CP viewer	M0-M24

WP5 extension - partners

		WP5
Organisation	Country	
VLIZ	BE	Lead
BODC	UK	X
BUP	IT	X
IFREMER	FR	X
ISEN	FR	X
MARIS	NL	X



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