

EMODnet for Global

- EU-China Ocean Data Partnership EMOD-PACE EMODnet4OceanDecade Ocean Decade Data Coordination Platform Towards a Data Strategy of the OD Other upcoming activities and events IODE Ocean Data Conference (Paris, March 2021)

EMODnet Secretariat

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17th EMODnet Steering Committee 7-8 November 2022

EU-China Partnership projects EMOD-PACE & CEMDNET

Strengthening international ocean data through the EU's ocean diplomacy with China

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Objectives

- Facilitate European and Chinese engineers and scientists to build up a picture of the marine environment using data from both sources.
- Promote international ocean governance and support the implementation of global commitments by making ocean marine data and data products more easily accessible and by providing better data and data products.
- ➤ 18 European partner organisations (EMODnet thematics, including JNCC & Ifremer for seabed habitat mapping) with National Marine Data and Information Service of China (NMDIS)
- > **Duration** 19 February 2020 till 31 December 2022

Partnership



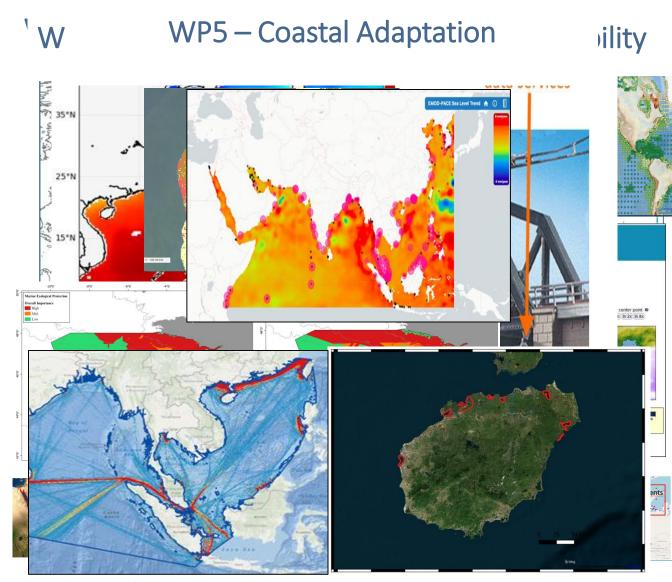
EU-China Partnership projects EMOD-PACE & CEMDNET

Strengthening international ocean data through the EU's ocean diplomacy with China



The project connects the European Marine Observation and Data Network (EMODnet) with the Chinese National Marine Data and Information System (NMDIS) by:

- Setting up a bilingual English-Chinese project information web-site providing a gateway to the project results;
- Maximizing interoperability between EU and Chinese marine data services, and data products and information systems;
- Comparing European and Chinese models by
 - ✓ comparing reanalysis & model results with historic data
 - ✓ analyzing of applicability of each sides models for seabed habitat and ecosystem vulnerability;
- Providing reliable information to support coastal adaptation on the sea route between China and Europe
 - ✓ Wetland Degration
 - ✓ Sea Level Rise
 - ✓ Vessel Density Maps
 - ✓ Coastal Erosion



EMODnet Partnership for China and Europe – Funded by European Commission Foreign Policy Instrument

Highlights to present

EU China Blue Year Event forecasting, data, monitoring, planning, indicators





EU delegation visited **NMDIS**



September 2018









July 2018

China and EU signed a Blue Partnership for the Ocean





EMOD-PACE, **CEMDnet Mid-term** meeting and MoU between EMODnet and NMDIS Portals online with map viewer & Helpdesk

January 2021



Meetings for the preparation of **EMOD-PACE** next milestones and deliverables in all work-packages

December 2021

February 2020

EMOD-PACE (EMODnet PArtnership for China and Europe) project funded by the Partnership Funding Instrument (PI) and managed by the Unit FPI.4 called Industrialized Countries & Foreign Policy Support (€3.5million, 30 months)







October 2021

- 1. EMOD-PACE CEMDnet WP1 and WP2 meeting
- 2. EMOD-PACE CEMDnet IODE and ODIN WESTPAC meeting
- **3.** Project Management **Board** meeting





2022

Inter Services Steering Committee meeting advice & Request for project extension



Early February 2022

Project Management Board focus on

- 1. High level meeting
- 2. Common Work Plans
- 3.Dissemination

March 2022





Mid February 2022

- 1. M24 Milestones and Deliverables
- 2. Interim Report



Joint High Level

Meeting

EMODPACE-

CEMDnet (remote)



Project

Management

Board meeting in

Brussels, in situ



May-December 2022

Dedicated Dissemination & Communication Activities

Marine Knowledge Expert Group meeting Online







Project Management Board meeting Online



Workshop (Task 1.3) hybrid Oostende



Final Conference, hybrid Oostende





中国-欧盟海洋数据网络伙伴关系 European Union-China Marine Data Network Partnership (EMOD-PACE)

China-EU Marine Data Network Partnership (CEMDnet) 中国-欧盟海洋数据网络伙伴关系

Open Workshop

Improving FAIRness of European and Asian marine data and data products for regional and global users

Experiences and solutions for data interoperability, comparing modelling approaches and generation of coastal adaption data products from the EMOD-PACE & CEMDnet projects

Date & Time: Tuesday 22 November 2022 08:30-12:30 Central European Time (CET) / 15:30-19:30 (UTC/GMT+8 for Tianjin)

Location: This is a hybrid workshop with EMOD-PACE speakers participating on site at InnovOcean Campus in Ostend, Belgium (room tbc) and CEMDnet experts on site at NMDIS offices in Tianjin, China; all wider partners, invited guests, speakers and interested stakeholders are invited to join via remote connection.

Remote Meeting link: webex TBC

Workshop organised in the framework of WP1 - Task 1.3 Extend the web portal to allow users to discover and view data held by Asian data centres, not yet included in our catalague, with common formats, to

- Broaden the collaboration in the Asia Region.
- Combine data from different/broader regions with already existing/open data from NMDIS/EMODnet might give new scientific insights
- Data, products & metadata stay in original datacentre (not copied over). Using OGC web services to display products. Geonetwork for displaying unified metadata catalogue
- Exchange of technical knowledge, i.e. OGC & INSPIRE standards

Programme & Agenda

Workshop Programme – Tuesday 22 November 2022				
Session	Timing	Agenda		
Opening and setting the scene	8:30-9:00 CET 15:30-16:00 (UTC/GMT+8 for Tianjin)	Welcome and opening Remarks: agenda and objectives of the workshop, aims and objectives of the Partnership and benefits of joining the efforts – EMOD-PACE and CEMDnet Project Coordination Offices - 15' High level overview of achievements made through the partnership to date, with a demonstration on how users may access the data catalogue - EMOD-PACE and CEMDnet leads - 15'		
Expanding Information Services and Data Interoperability	9:00-10:00 CET 16:00-17:00 (UTC/GMT+8 for Tianjin)	Overview of information resources, technologies and tools used by EMOD-PACE - CEMDnet to share data and connect open data resources with examples, guidance and lessons learned for interested stakeholders - WP1 and WP2 leads − 30′ ✓ Showcasing technologies and tools used in the project and how others can benefit such as ODIS CAT, ERDDAP, GEO-DAB, B2DROP, GEONODE/GEOSERVER WEBSERVICES ✓ Demonstration of how to download project data and data products ✓ Demonstration of how to connect data services via the brokerage tools (e.g. showing ERDDAP as a step in the process) Showcase example or case study with concrete (or potential) collaboration with another Asian organisation and assess if these could be making use of any of the above and connect/provide access to data and products − 15′ Questions and Answers, Open discussion − 15′		
		Break (15 minutes)		
Strengthening Scientific collaboration on modelling and data product generation	10:15-11:15 CET 17:15-18:15 (UTC/GMT+8 for Tianjin)	 Overview substantive work achievements on modelling and data products for Coastal Adaptation – EMOD-PACE WP3-WP5 leads and NMDIS - 15' Demonstration of products developed on Coastal adaptation – 15' Showcase an example or case study with existing or potential collaboration on joint data product development and improving ocean and coastal modelling and forecasting capabilities – 15' Questions and Answers, Open discussion – 15' 		
Break (15 minutes)				
Looking forward: Global and regional initiatives as a framework for further collaboration	11:30-12:30 CET 18:30-19:30 (UTC/GMT+8 for Tianjin)	 Regional collaborations on data sharing under the auspices of IODE, ODIN-WESTPAC – NMDIS – 10′ Global collaborations on sharing data and information under the auspices of IODE, infohub – Lucy Scott – 10′ Global collaborations in the framework of the UN Ocean Decade, COASTPREDICT and DCC on Coastal Resilience – Nadia Pinardi – 10′ Open discussion on ✓ How can the EMOD-PACE and CEMDnet legacy support global developments and contribute to the Decade of Ocean Science, and IODE? ✓ What framework for expanding the intra-regional and inter-regional collaborations? Summary of conclusions and next steps Closing of Workshop 		

Strengthening Partnerships for International Interoperability and Impact



Educational, Scientific and Cultural Organization









2021 United Nations Decade of Ocean Science 2030 for Sustainable Development

















- **Europe Marine Observation & Data Community as** key partner for open data, open science, data diplomacy and digital data stewardship;
- Providing Interoperable data discovery and access, in collaboration with other key data services worldwide
- Further diversifying data parameters and sources (e.g. industry, citizen science)
- **Extending FAIR** to FAIR, CARE and TRUST





































G7 FUTURE





Transparency, Responsibility, User focus, **S**ustainability and **T**echnology



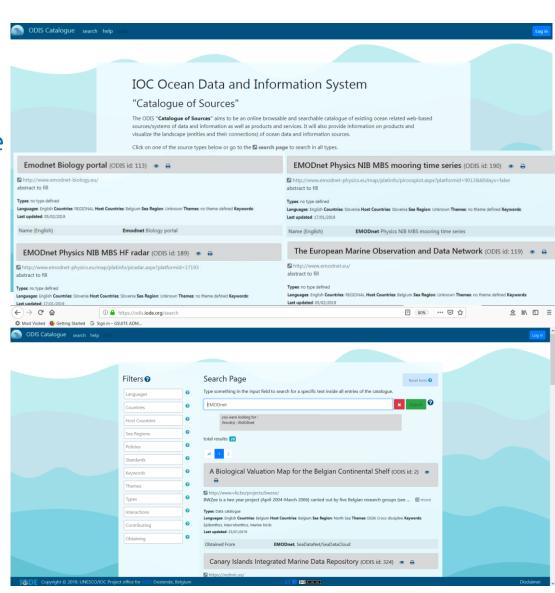






EMODnet already contributes in diverse ways to IOC, IODE and the UN Ocean Decade

- The UN Ocean Decade (OD) Data Coordination Group & Data Strategy (under preparation);
- The IODE IWG-SODIS (Intersessional Working Group)
 Strategy on Ocean Data and Information Stewardship for the UN Decade;
- Multiple inputs to UN OD Programmes and Actions, e.g.:
 - → DITTO (Digital Twins of the Ocean)
 - → COAST PREDICT (Coastal Resilience)
 - → Ocean Best Practices (OBPS)
 - → And many more...
- The Ocean Data and Information System (ODIS): All EMODnet thematic portals/central portal are registered on ODIS catalogue. Additional records will be added from the EU-China EMOD-PACE marine data project;
- IOC Ocean InfoHub Project (OIH): EMODnet is a European focal point & technical advisor to the development of ODIS architecture & interoperability with EMODnet.



EMODnet and the Decade: The EMODnet Decade Coordination Group

- Established at 16th EMODnet SC Meeting (April 2022)
- Kick-off meeting held in June 2022
- Facilitated by the Secretariat





- Provides a platform to discuss Ocean Decade related matters, identify gaps and opportunities in representation on Ocean Decade Actions and/or initiatives or bodies, channel information, and provide consolidated advice.
- ✓ Contribute/propose developments towards a fit-for-purpose EMODnet to maximize contribution and added value to the UN Ocean Decade (UN OD);
- ✓ Discuss common challenges and opportunities for EMODnet presented by the participation in the UN OD:
- ✓ Provide advice on gaps and actions to be undertaken by the EMODnet community in light of the UN OD:
- ✓ Exchange information on the number, nature and types of involvements of EMODnet in the UN OD Actions, programmes and initiatives;
- ✓ Streamline the interactions between the EMODnet partners & share/transfer expertise/knowledge to build capacity;
- ✓ Develop a long term strategy for further involvement and strengthening the OD mission and in particular the Data Component:
- ✓ Provide/Channel advice to DG MARE, the EMODnet Steering Committee, the Ocean Decade advisory boards, etc.
- ✓ Develop a communication plan & align messaging/communication, with a dedicated section on the EMODnet website

EMODnet for the Ocean Decade Coordination Group (E4OD-CG) Terms of Reference (ToR)

- First version in February 2022
- Approved at the 16th EMODnet Steering Committee Meeting (April 2022)
- Presented and approved at the EMODnet for the Ocean Decade Coordination Group Kick-off Meeting (June 2022)

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The Ocean Decade UN SDG 14 & Data





Framework
The Science We Need

for Data the Ocean We Want Data and information will be key enablers of the United Nations Decade of Ocean Science for Sustainable Development, and by extension in achieving SDG14.

Digitizing, preserving, managing, exchanging and, most importantly, using a significantly increased volume and range of ocean-related data, information and knowledge will be cornerstones of the success.

The Ocean Decade UN SDG 14 & Data



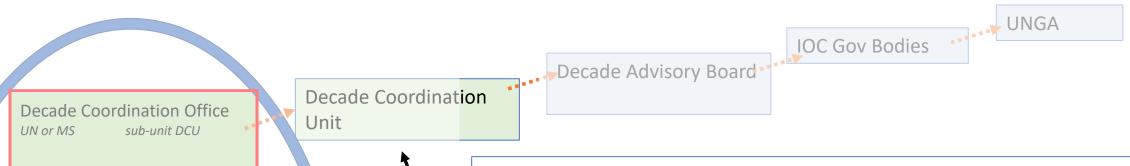


Framework
The Science We Need

for Data the Ocean We Want

Towards a distributed digital data and information ecosystem capable of:

- holistically representing the complex socio-ecological ocean system;
- representing the ocean's role in sustainable development across scales.
- Allowing ALL STAKEHOLDERS to access, use, and contribute to this digital ecosystem using interfaces tailored to their needs and capacities.



Ocean Decade Data Coordination Platform

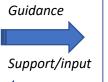
to coordinate the collaboration between the vast number of partners that will contribute data to, as well as use data and products from the envisaged "digital ecosystem"

Two components:

A. Data coordination group

Forum for exchange & coordination

Provide advice to the Decade coordination and governance structures



Report back

B. Technical Implementation Coordination Group

Technical collaboration forum to develop the technical elements required to build the "digital data ecosystem"



Strategic plan

Gap analysis Advice on actions to fill gaps **Progress monitoring**



Community of Practice

Decade

project

Decade Collaborative Centre

coordination

Decade programme

Decade

project

(D, 1 & K)

Decade

project

Int/regl org Catalysis/coord

of decade actions

reporting support



Why do we need a Data Strategy?

- Difficult for scientists to find and access the right data
- Gaps in key datasets and regions e.g. only 23% of seabed is mapped
- The ocean data landscape at global level is still very fragmented
- Proliferation of disconnected databases and platforms, of unknown quality
- Limited connections across disciplines and source e.g. socio-economic, ILK
- ...

Strategy purpose & scope

Purpose

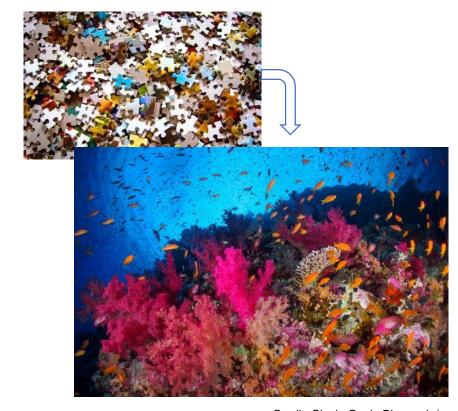
- Foster the requirements and recommended implementation of the "digital ecosystem" that will underpin the Ocean Decade
- Provide end-users with a sustainable legacy beyond the Decade

Desired outcome

 Strategic plan with actionable goals - useful to the global community and actively used

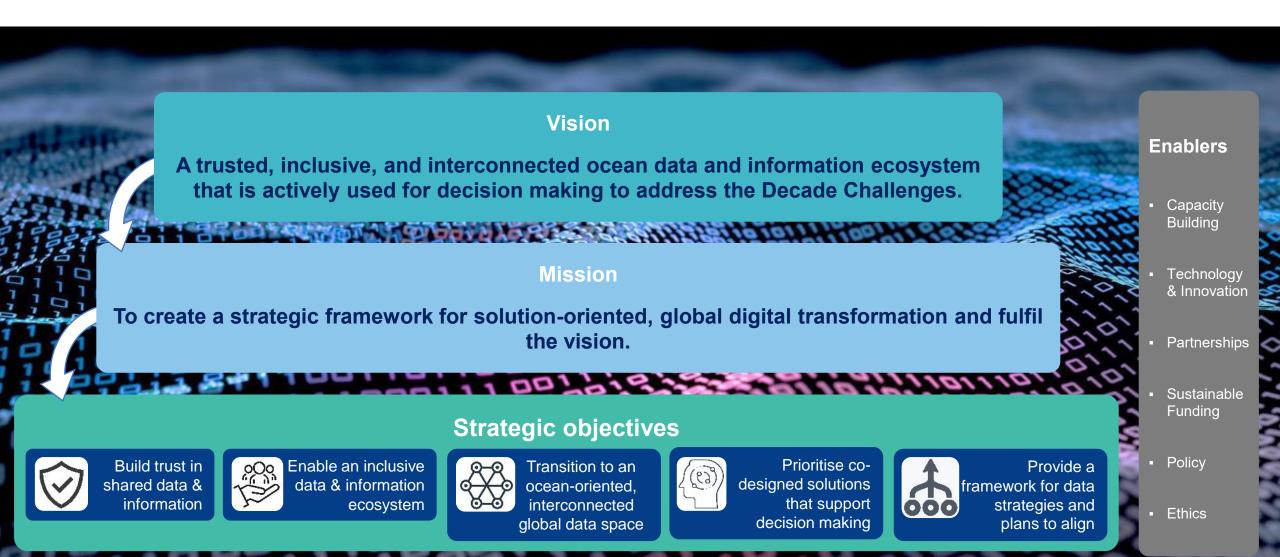
Target audience

- □ Decade actors endorsed Actions, DAB, DCO/DCCs, etc.
- UN Agencies and bodies beyond IOC (WMO, FAO, etc.).
- Wider ocean community, including all stakeholders concerned with or dealing with ocean data and information.



Credit: Cinzia Osele Bismarck / Ocean Image Bank

Strategy Framework



Strategy House

Vision

A trusted, inclusive, and interconnected ocean data and information ecosystem that is actively used for decision making to address the Decade Challenges.

Mission

To create a strategic framework for solution-oriented, global digital transformation and fulfil the vision.

Strategic Objectives

- 1. Build trust in shared data & information
- by ensuring it is secure and of known quality and provenance.
- 2. Enable an inclusive data & information ecosystem
- that allows different data types to be made available and combined as needed equitably by all users worldwide.
- 3. Transition to an interconnected, ocean-oriented global data space
- behaving as a seamless whole, with ever-deeper interconnection and interoperability.
- 4. Prioritise co-designed solutions that support decision making
- to address the Decade Challenges.
- 5. Provide a framework for data strategies and plans to align
- that enables Decade Action data strategies and plans to align.

Enablers

Capacity Building Technology & Innovation Partnerships Sustainable Funding

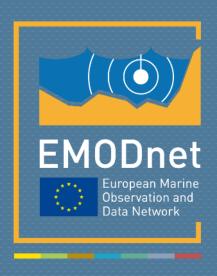
Policy

Ethics



Call for abstracts International Ocean Data Conference – II





emodnet.ec.europa.eu

Your gateway to marine data in Europe



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