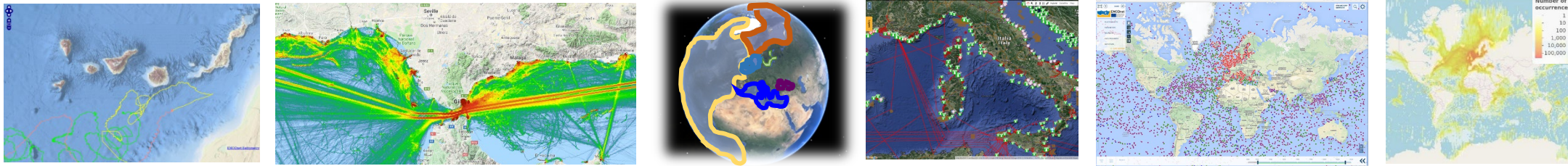# Europen Marine Observation and Data Network (EMODnet)
for the Ocean Decade and supporting global users

EMODnet Secretariat
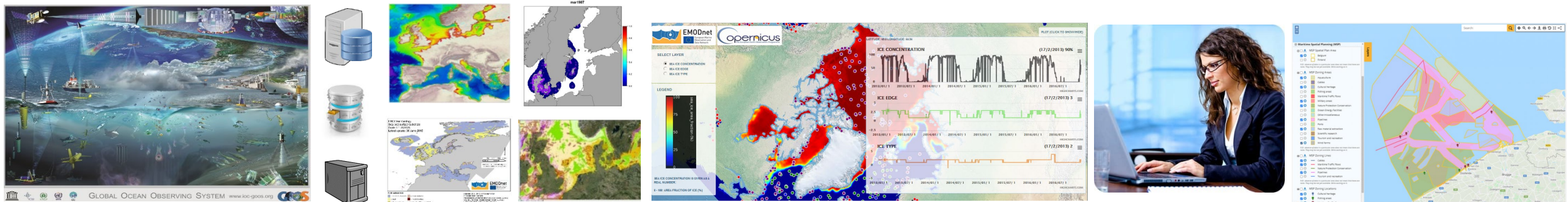
secretariat@emodnet.eu

- *From national to regional to Pan-european to global*

- *Bringing people & ideas together*

- Towards an overarching digital *ocean data ecosystem* accessible to all

EMODnet
European Marine
Observation and
Data Network

EMODnet: Strategic European and Global Partnerships

EMODnet for the UN Ocean Decade
EMODnet as a Decade Implementing Partner
A leading regional marine data, information & knowledge serv

Covers all 6 UN Ocean Decade objectives:

- ✓ A safe **ocean**
- ✓ A sustainable and productive **ocean**.
- ✓ A transparent and accessible **ocean**.
- ✓ A clean **ocean**.
- ✓ A healthy and resilient **ocean**.
- ✓ A predicted **ocean**.

Particularly the cross-cutting theme: a transparent and accessible ocean and challenges requiring the generation of knowledge via EMODnet's wealth of (increasingly centralized) open source, free & FAIR data and data products, via data and web services, driving open science, democratizing access to information and the co-creation of knowledge etc.

Co-Chair of the UN Ocean Decade (OD) Data Coordination Group (EMODnet Secretariat);
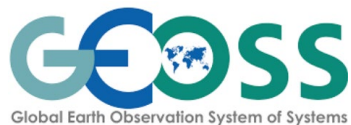
emodnet.ec.europa.eu

EMODnet: A regional marine data, information and knowledge service directly contributing in diverse ways to the UN Ocean Decade

UNESCO — United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission

2021 2030 United Nations Decade of Ocean Science for Sustainable Development

IODE — International Oceanographic Data and Information Exchange

OIH — Ocean InfoHub

14-16 June 2021
#EMODnetConference

A Vision for 2030.

unesco
Intergovernmental Oceanographic Commission

"We want global data and information systems and EMODnet's guidelines are great for community of practice. The network is also a role model for other regions."
Peter Pissierssens, IOC-IODE UNESCO

- **Contributor and expert to the IWG-SODIS Intersessional Working Group Strategy on Ocean Data and Information Stewardship for the UN Decade** (EMODnet Coordinators);

- **Multiple inputs to UN OD Actions:**
  - **DITTO** (Digital Twins of the Ocean, Steering partner)
  - **COAST PREDICT** (Advisor role)
  - **Ocean Best Practices** (EMODnet referenced)

- **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.

- **Co-Chair of the UN Ocean Decade (OD) Data Coordination Group** (EMODnet Secretariat);
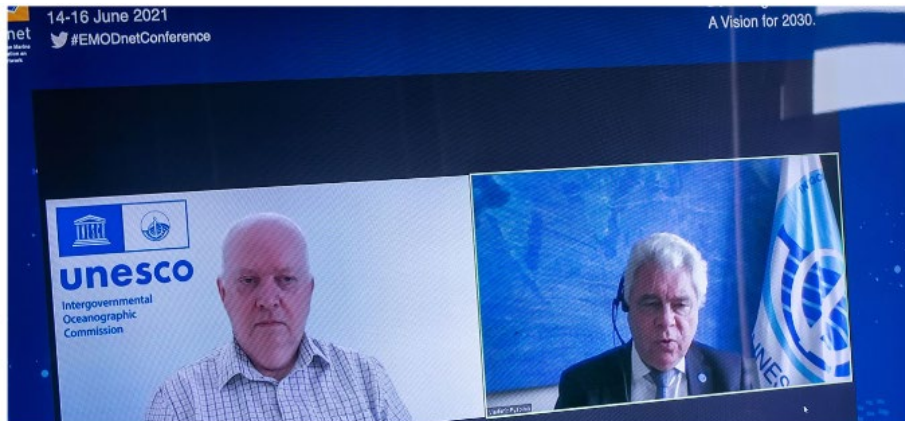
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EMODnet
European Marine Observation and Data Network

EMODnet: Testimonials from global stakeholders and users

"The European Union and EMODnet, provide the most advanced data management of marine data in the world, and this should be better promoted"
Phil Weaver, former Scientific Director of the National Oceanogrpahy Centre in Southampton, former Chair of the EMODnet Steering Committee

"We want global data and information systems and EMODnet's guidelines are great for community of practice. The network is also a role model for other regions."
Peter Pissierssens (IOC-IODE UNESCO)

"EMODnet – a true hallmark in Marine Observations, Data and networking – is hugely important, not only for Europe, but as an example for other regions, and a valuable partner for IOC of UNESCO".
Vladimir Ryabinin (IOC-UNESCO)

"EMODnet, together with Copernicus Marine Service and other EU assets, will be at the forefront of developments towards the Digital Twin of the Ocean and the elaborate system models of Destination Earth…….
The work of EMODnet is at the heart of DG MARE's activities. It's among the highest priorities to ensure EMODnet's continuity, sustainability and developments"
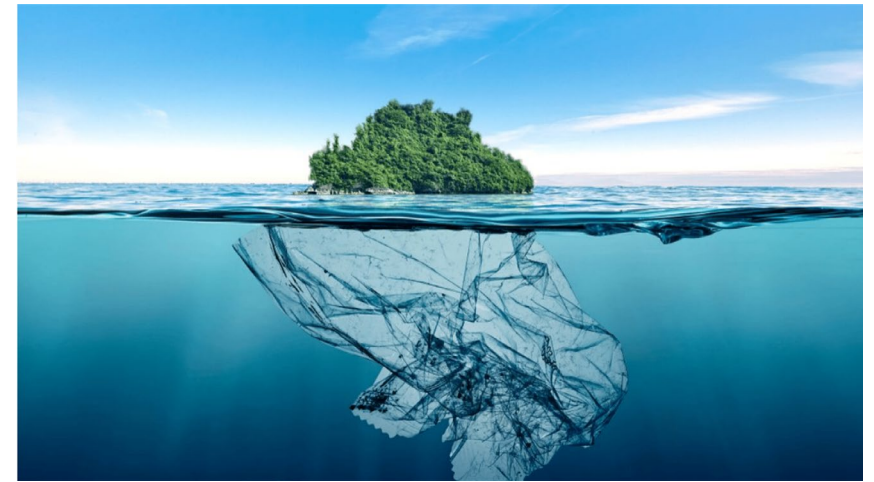Charlina Vitcheva, EC, DG MARE

The Ocean Decade
UN SDG 14
& Data

United Nations Decade
of Ocean Science
for Sustainable Development
2021 2030

" ~~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.
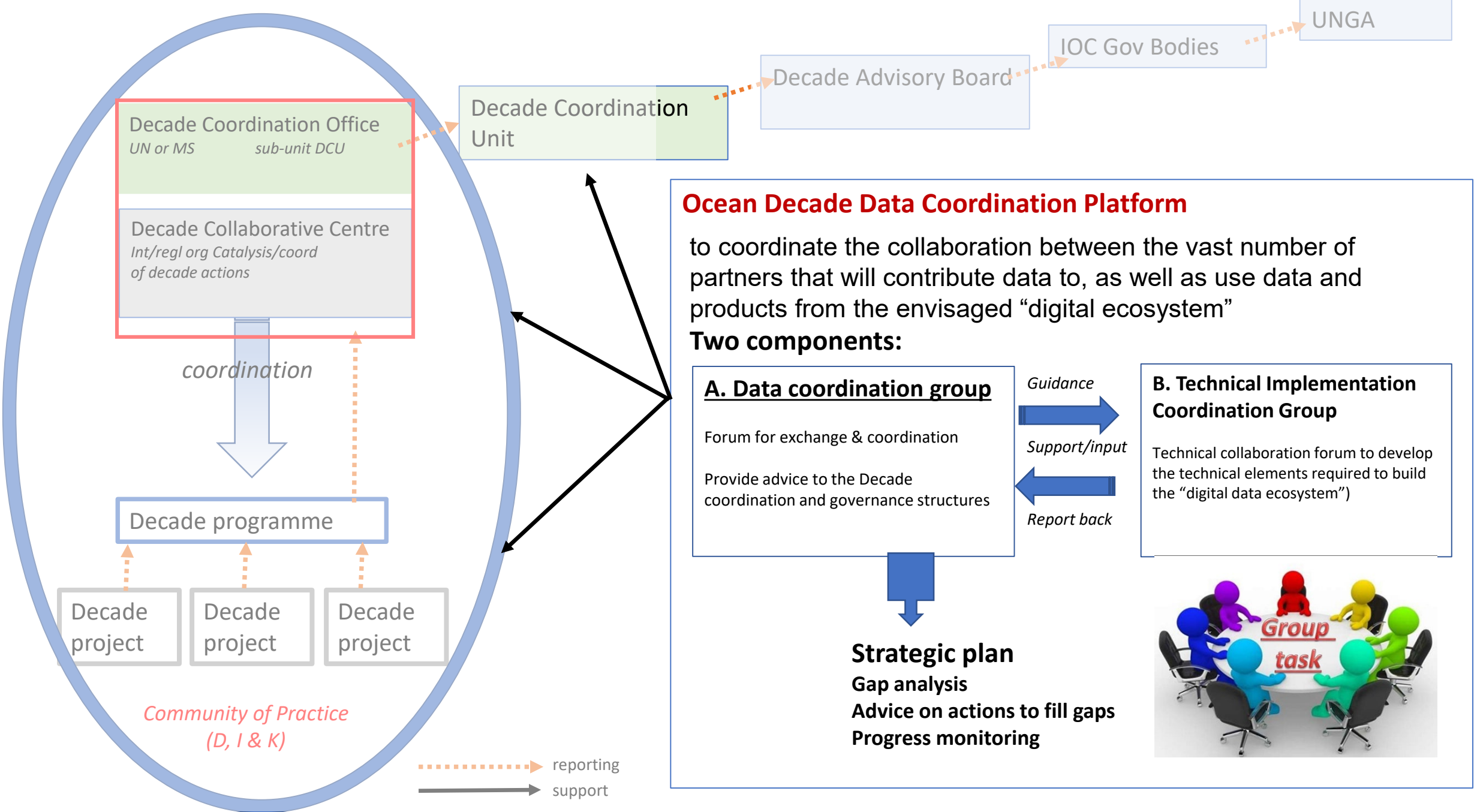
Decade Coordination Office
UN or MS   sub-unit DCU

Decade Collaborative Centre
Int/regl org Catalysis/coord of decade actions

coordination

Decade programme

Decade project

Decade project

Decade project

Community of Practice (D, I & K)

Decade Coordination Unit

Decade Advisory Board

IOC Gov Bodies

UNGA

reporting

support

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

Guidance

Support/input

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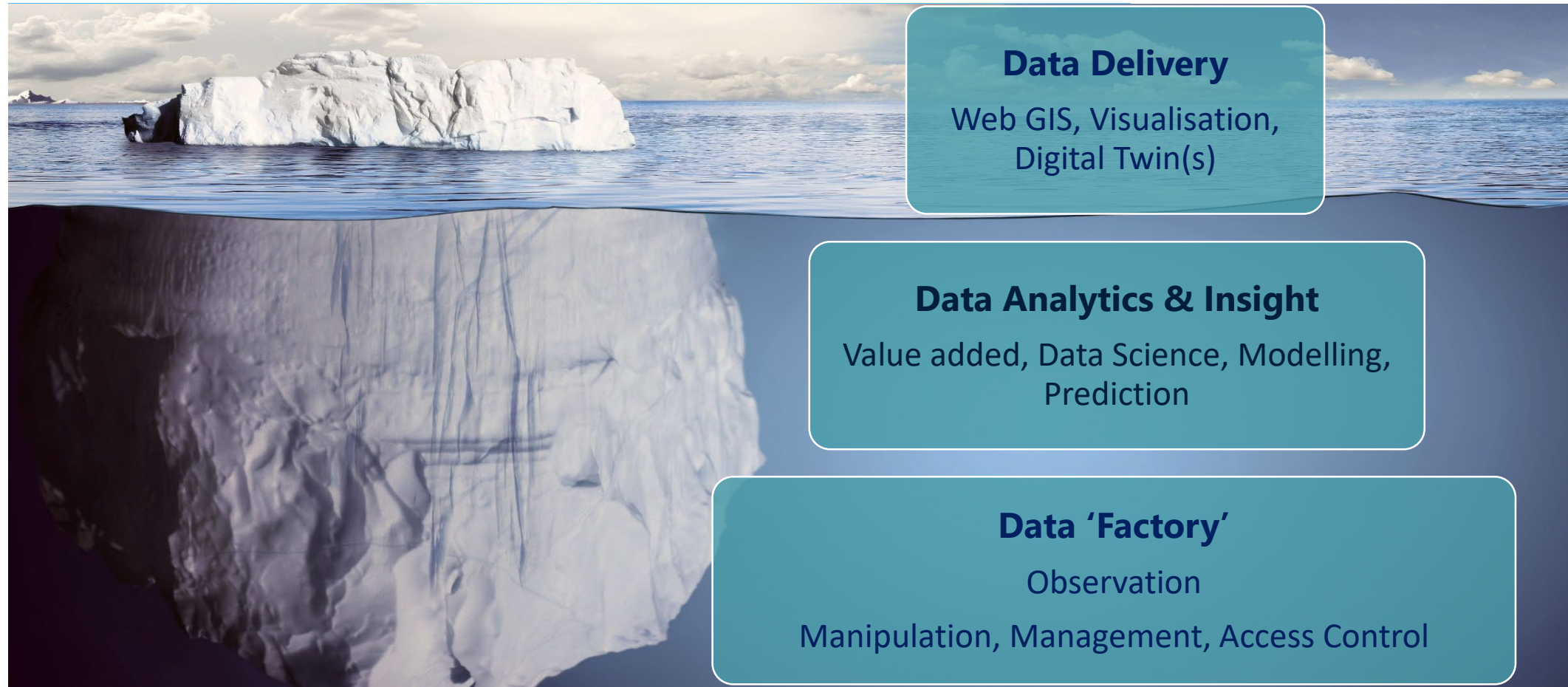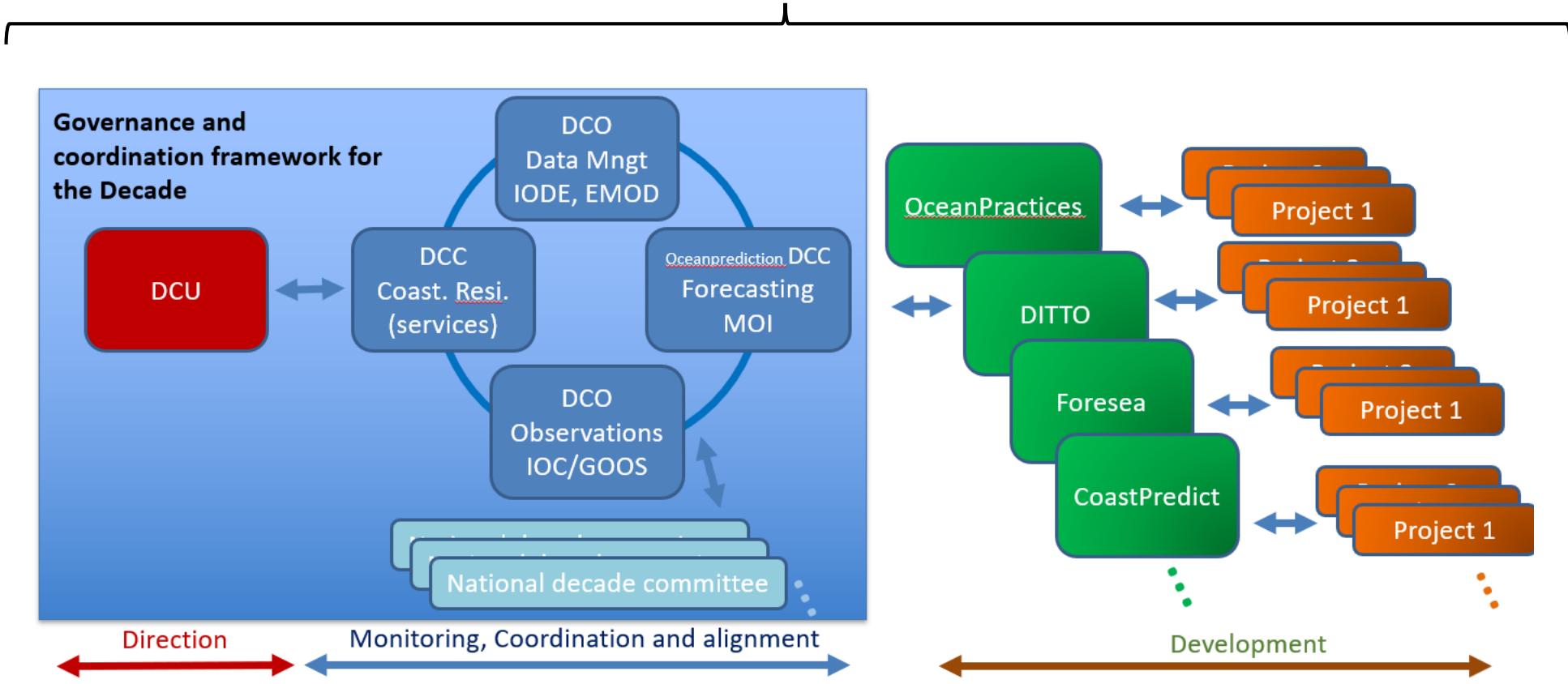**Advice on actions to fill gaps**
Progress monitoring

Group task

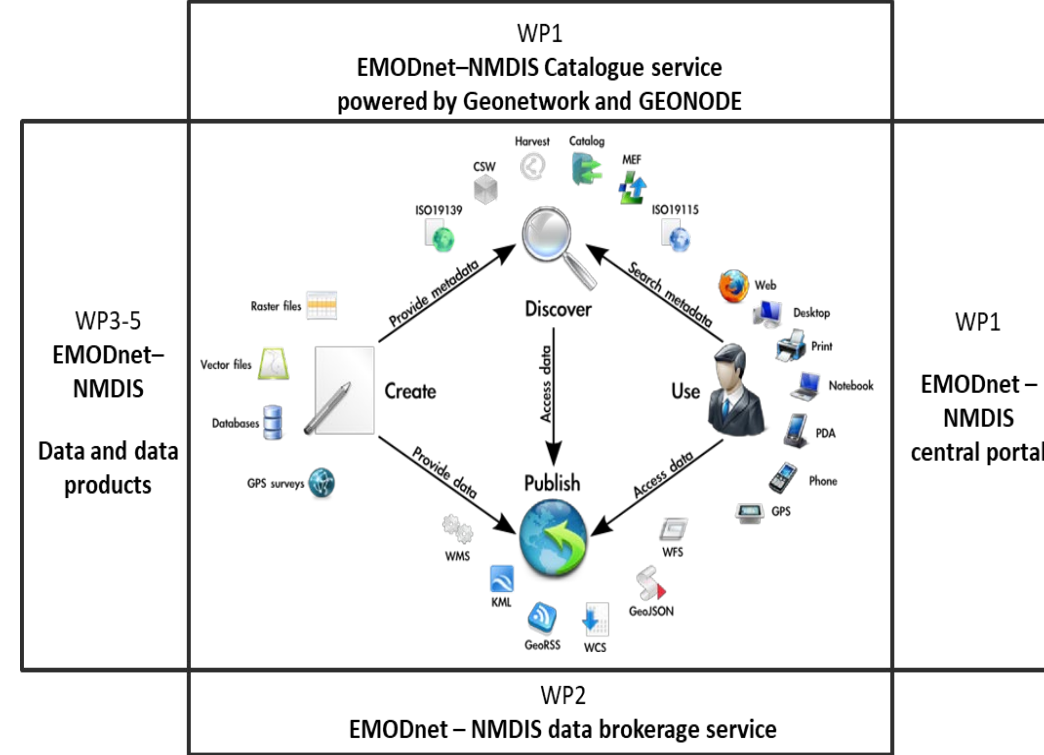# Some reflections on the envisaged Ocean Data Eco-system
Foundational components of the 'Digital Eco-system'
that are integral to all science projects Managing Data and Knowledge during the Ocean Decade

Data Delivery

Web GIS, Visualisation,
Digital Twin(s)

Data Analytics & Insight

Value added, Data Science, Modelling,
Prediction

Data 'Factory'

Observation

Manipulation, Management, Access Control

From Terry McConnel (UNESCO-IOC, FUGRO)

Prepared by Enrique Alvarez Fanjul and the Mercator Ocean International team

mercator-ocean.eu

EMODnet Partnership for China and Europe - Strengthening international ocean data through the EU's ocean diplomacy with China
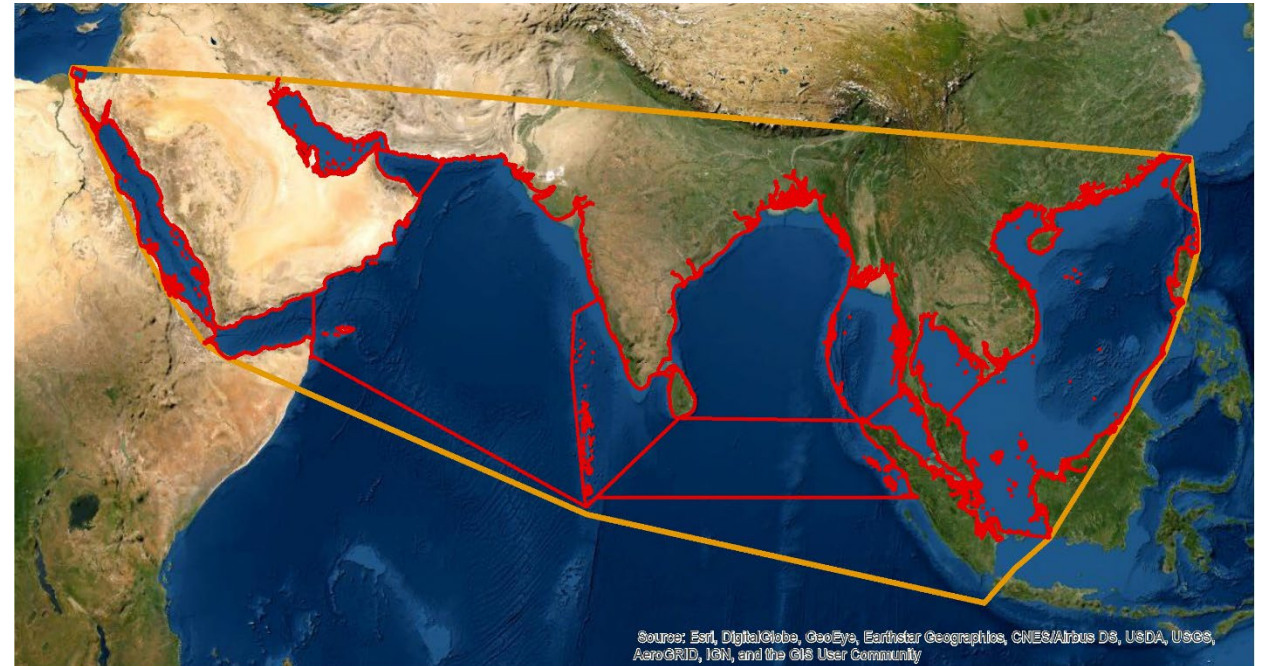
EMOD-PACE (EMODnet PArtnership for China and Europe)

WP5 Aims

The aim of WP5 is to provide data/information products covering the Seas crossed by the maritime silk road on:

- Relative sea level changes;

- Absolute sea level changes;

- Coastal erosion;

- Wetland degradation;

- Vessel traffic density.

WP5
Expected Outcome – Milestones and Deliverables

Milestone 5.1. Digital map available on line. Formats and standards agreed for parameters (M12)

Milestone 5.2. Digital map available with all parameters available for feedback (M24)

Milestone 5.3. Fully operational digital map incorporated in project web-site (M30)

Deliverable 5.1. Online discussion paper on the translation of mapped coastal behaviour into mapped coastal resilience, an applied data product with clear added value because it can be used in decision making (M30)

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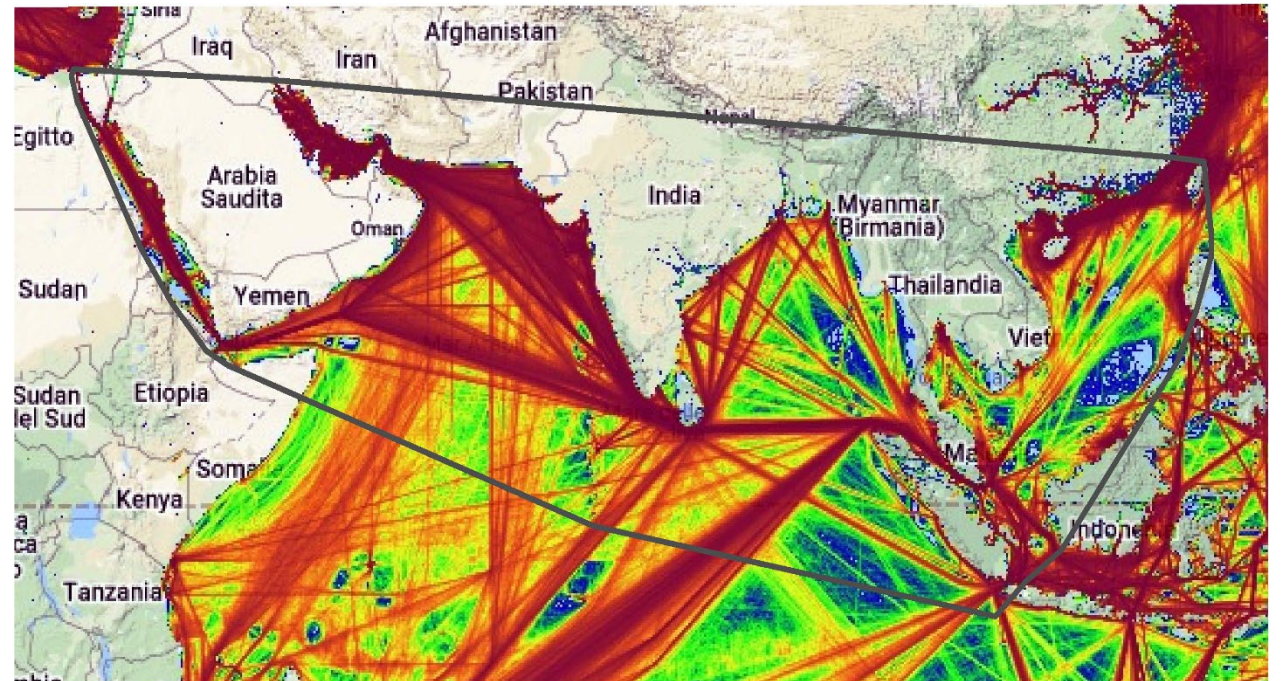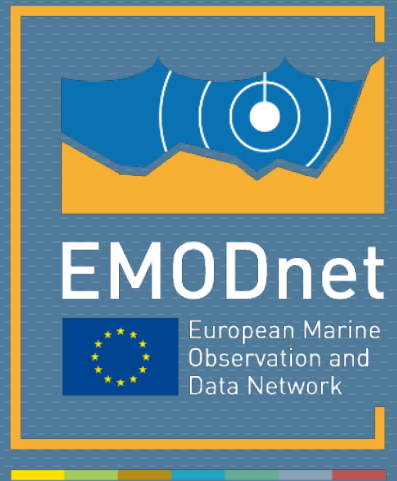
emodnet.ec.europa.eu

Your gateway to marine data in Europe

EMODnet for Global: Wider contributions to UN 2030 Agenda and UN Ocean Conference

- SDG 14.3.1 data portal on http://oa.iode.org

- SULITEST SDG14 MODULE - WORKING GROUP by UN DESA, sulitest and MOi (EMODnet Secretariat & EMODnet Chemistry)

- UN Ocean Conference 2021 (dates to be confirmed): Potential joint EMODnet-CMEMS side meeting on "Marine data for SDG14 and the UN2030 Agenda"