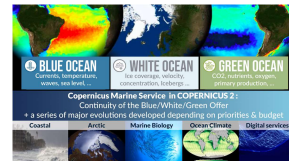


1) Political and technical **Kick-off** of operations

- **Kick-off** event with EC, partners and all contractors
- **Start of new contracts for 3-year operations**



2) **Planning** and delivering

- **Two new releases of Copernicus Marine Portfolio**
- **Ocean State Reports 6 & 7**



3) **Re-enforced governance: Marine User Forum**

4) Decision to entrust MOi for **Coastal and Arctic Thematic Hubs**

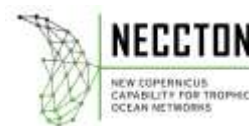
5) Start **coastal extension** of the service

6) **Brexit issues**

7) Ocean ECVs processing for C3S/ECMWF

8) **Innovation**

- **Selection and kick-off (June 2023) of 14 service evolution R&D projects**
- **Launch of our first user engagement calls – January 2023.**
- **H2020 and Horizon Europe (Copernicus evolution): ECFAS (with Emergency Service), NECCTON - Marine Biology and ACCIBERG - Arctic. Proposal for Coastal Marine.**





BLUE OCEAN

Currents, temperature,
waves, sea level, ...



WHITE OCEAN

Ice coverage, velocity,
concentration, Icebergs ...



GREEN OCEAN

CO₂, nutrients, oxygen,
primary production, ...

Copernicus Marine Service in COPERNICUS 2 :

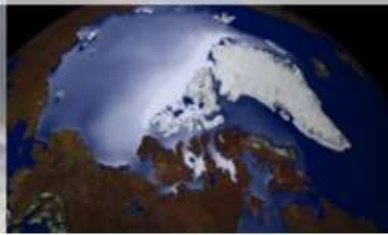
Continuity of the Blue/White/Green Offer

+ a series of major evolutions developed depending on priorities & budget

Coastal



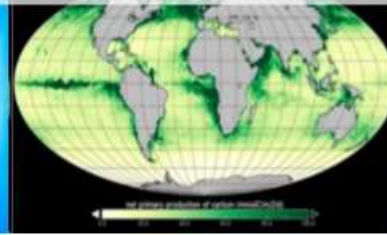
Arctic



Marine Biology



Ocean Climate



Digital services



USERS, APPLICATIONS AND USER UPTAKE

*A wide range of applications (environment, society, economy)
Support to EU policies (Green Deal) – regular increase of user uptake*

49,000
subscribers
(+ 20% per year)

680,000
single visitors
per year on the
web portal in 2022
(+ 40% wrt 2021)

ENVIRONMENT				SOCIETY				ECONOMY			
POLAR ENVIRONMENT MONITORING	MARINE CONSERVATION & BIODIVERSITY	OCEAN HEALTH	CLIMATE & CLIMATE ADAPTATION	POLICIES & OCEAN GOVERNANCE & MITIGATION	EDUCATION, PUBLIC HEALTH & RECREATION	SCIENCE & INNOVATION	EXTREMES, HAZARDS & SAFETY	COASTAL SERVICES	MARINE FOOD	NATURAL RESOURCES & ENERGY	TRADE & MARINE NAVIGATION
Arctic policy, MSFD, MSP, WFD, Habitat Directive, Birds Directive, Natura 2000, the Convention on Biological Diversity, WMO/UNFCCC, IPCC, the Paris agreement / global stocktake, SDG 13, 14, 15				Arctic Policy, MSFD, MSP, WFD, IOS, The Sendai Framework for Disaster Risk Reduction, SDG 1, 2, 3, 4, 5, 8, 7, 9, 11 and 16, 17				Space policy, Flood Directive, Green Deal, Energy Policy, Air Quality Directives, SDG 8, 9, 10, and 12, 17			

The infographic displays 12 numbered icons arranged in three columns:

- Environment (Green icons):** 1. Polar Environment Monitoring, 2. Climate & Adaptation, 3. Ocean Health, 4. Marine Conservation & Biodiversity.
- Society (Pink icons):** 5. Science & Innovation, 6. Policies & Ocean Governance & Mitigation, 7. Education, Public Health & Recreation, 8. Extremes, Hazards & Safety.
- Economy (Brown icons):** 9. Marine Food, 10. Coastal Services, 11. Trade & Marine Navigation, 12. Natural Resources & Energy.

A globe on the right side of the infographic is labeled with 'Environment', 'Society', and 'Economy' and features various icons representing these sectors.

JULY 2022 AND NOVEMBER 2022 PRODUCT RELEASE

July 2022

- A new hourly near-real-time wind satellite product at 0.125-degree horizontal resolution for the Global Ocean (L4).
- The number of satellite Ocean Colour products has been greatly reduced (data reorganization).

November 2022 (major release)

- 2 new satellite **WIND** products (L4, Multi-Year)
- 2 new Multi-Observation **SALINITY** products (L3, L4, from SMOS)
- Addition of **CLIMATOLOGIES [1993-2016]** for model Multi-Year products
- Addition of new **GREEN VARIABLES** in BGC models such as Alkalinity and Dissolved Inorganic Carbon
- Addition of new **WHITE VARIABLES** in Physics & Sea-Ice models such as albedo, sea ice type, sea ice age, area fraction of ridged ice
- Numerous **PRODUCT QUALITY IMPROVEMENTS** (e.g. Global and IBI MFC)



Marine Monitoring

UPDATED MARINE DATA STORE LOOK&FEEL

The way to access the Copernicus MARINE DATA STORE has been updated:

- New design and look & feel
- Faster to load pages
- Easier to search and explore data
- More intuitive to download data
- Now includes Indicators and Trends products
- New filters
- And much more....

More information

NEW FILTER FOR EU DIRECTIVES!!

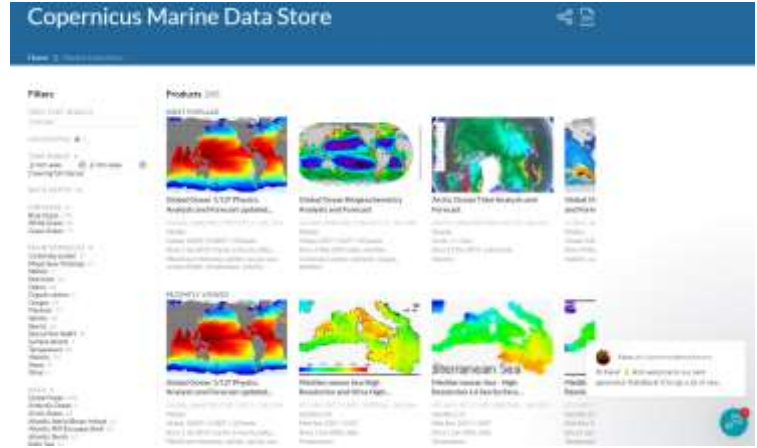
EU DIRECTIVE ▲

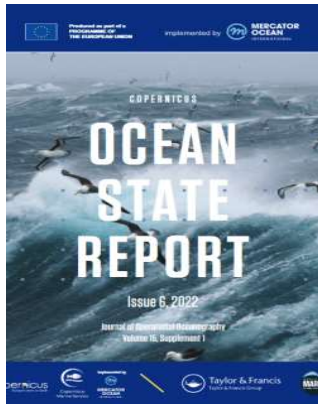
ARCTIC policy 16

Marine Strategy Framework Directive (MSFD) 1

Maritime Spatial Planning (MSP) 2

Water Framework Directive (WFD) 1





Publication of OSR6 (JOO) and its summary

From OSR7 : State of the Planet / Copernicus Publications



NATIONAL MARINE STAKEHOLDER FORUM

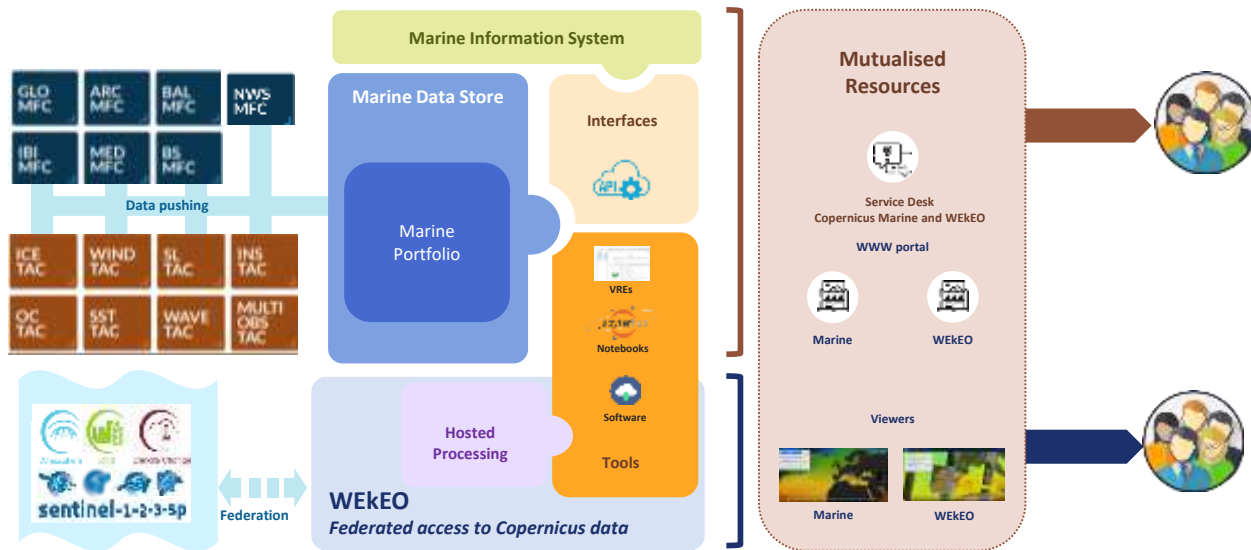
First meeting of the Marine Forum took place on October 17, 2022.

Next meeting planned in May 2023.

Objectives:

- ⇒ Foster deeper interactions with Member and Contributing States (MS) in the marine domain.
- ⇒ Contribute to a better integration of the Copernicus Marine Service with MS expectations and assets.
- ⇒ Co-design and implement actions with MS in the coastal marine areas.

AN INTEGRATED COPERNICUS MARINE / WEKEO PLATFORM AND SERVICE EMBRACE NEW CAPABILITIES OF DIGITAL SERVICES



Copernicus Marine and WEKEO in Copernicus 2: **Integration of WEKEO services in the Marine services** (VREs, Notebooks), mutualization of development (www, Viewers) and User Support activities



In synergy with **Digital Twin Ocean** and **Destination Earth** initiatives



Towards a new offer for coastal marine

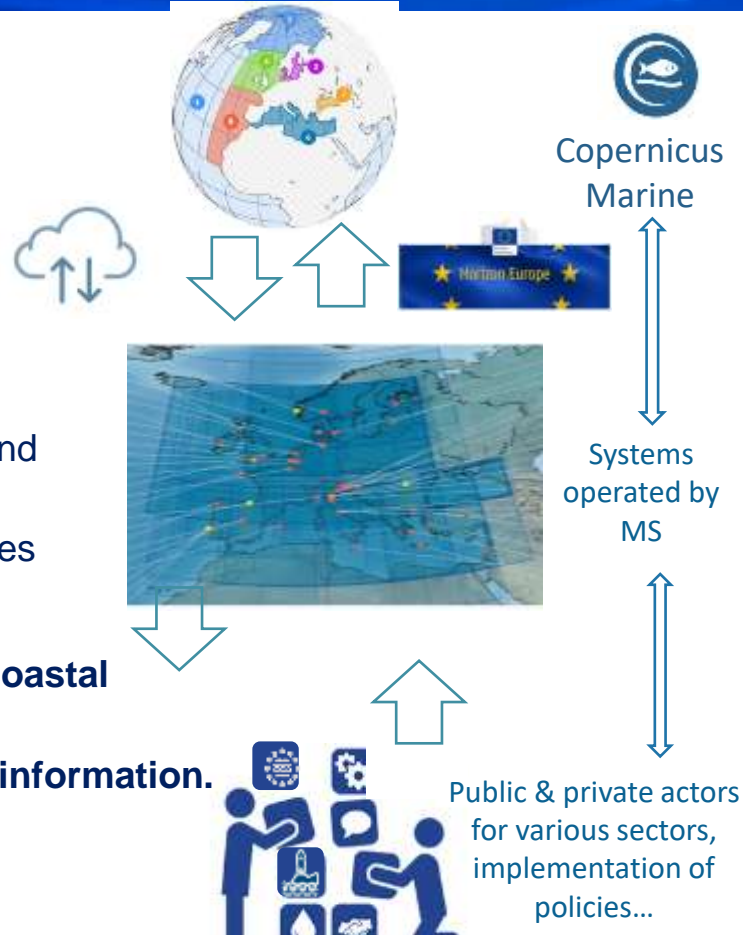


Improved coastal zone monitoring:

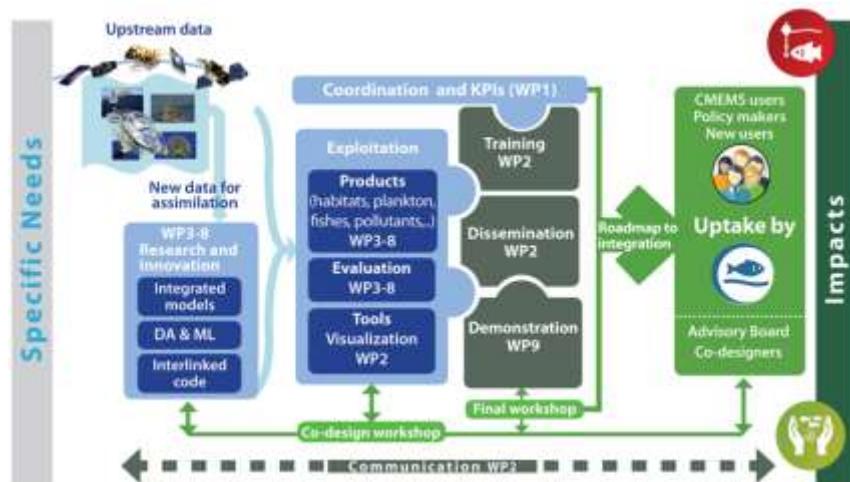
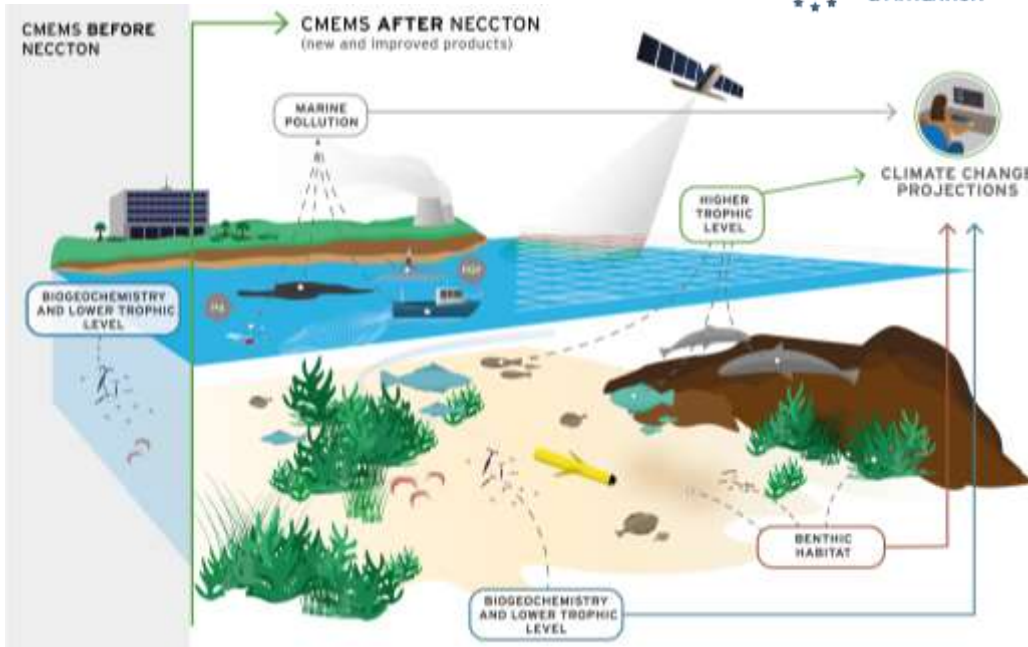
- ❑ **New or improved satellite products** (e.g. time evolving bathymetry, ocean colour, waves, winds, sea level,...).
- ❑ **Improved in-situ** data sets (JERICO, EMODnet).
- ❑ Towards standardized (freshwater, nutrients, particulate and dissolved matter) **modelled river discharges**.
- ❑ Cooperation with EMODnet, Emergency and Land Services

Co-design/co-production with Member States :

- ❑ **Coupling** between **Copernicus Marine** and a series of **coastal models** operated by Member States.
- ❑ **Integration** in Marine portfolio of **coastal model derived information**.



Overall objective => a step change in Copernicus Marine capability to inform biodiversity conservation and food resources management



- Duration: 4 years project (Jan 2023-Dec 2026) Kick-Off : 24-26 January, 2023
- Budget: 10 MEuros - Partners: 23
- PI: S Ciavatta (MOi); PM: J Heard (PML)



MOi leads the development of the **Copernicus Thematic Hubs for Coastal Zones and the Arctic**. Collaboration with EEs+KCEO (JRC, DG DEFIS). Design phase started. First demonstration web portals will be launched by mid-2023, and will include all existing Copernicus data. The two hubs will be based on WEKEO platform.