Powering the European Marine Data Ecosystem

For a digital and green future

EMODnet OPEN CONFERENCE 2023

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European Marine Observation and Data Network

Contribution of EMODnet to EU DTO via EDITO-Infra

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European Commission

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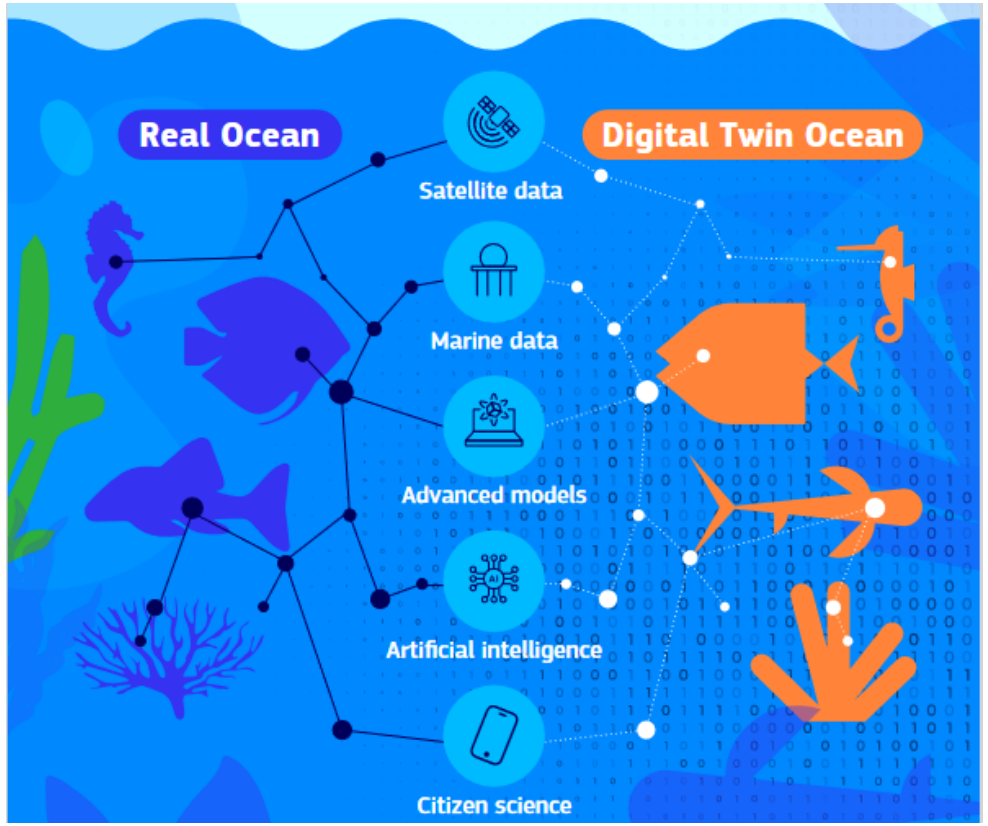
DIGITAL TWIN OCEAN

An interactive replica of the ocean for better decision-making

A **digital space** providing access to **vast amounts of data, models, artificial intelligence and other tools**, which will allow the **replication of the properties and behaviours of marine systems**, including ocean currents and waves, marine life and human activities, and their interactions, in and near the sea.



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European Digital Twin of the Ocean

A leap in ocean knowledge and sustainable action

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MERCATOR OCEAN INTERNATIONAL

VLIZ

DIGITAL TWIN OCEAN

data requirements

- a **continuos flow** of multidisciplinary data
- that describes the **changing state** of the marine (eco)system
- that describes the use of and **impact** on the marine (eco)sytem

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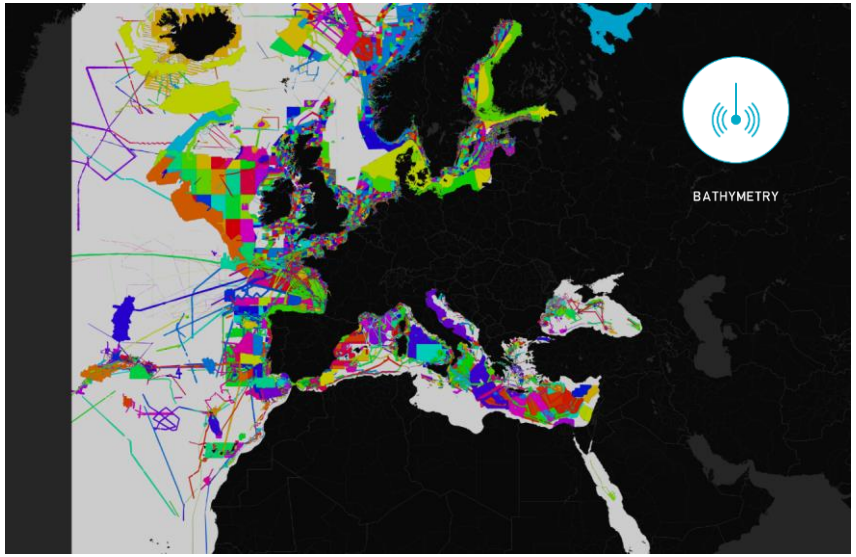
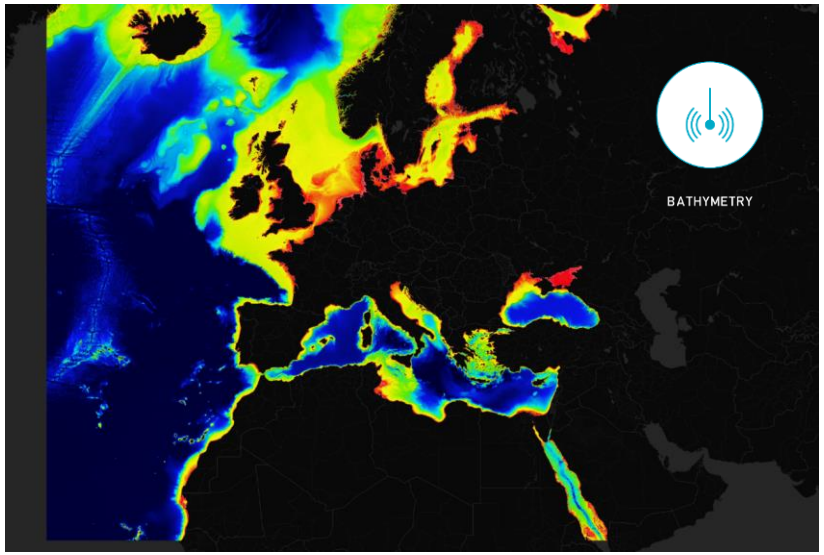
Future directions for EMODNET to power DTO applications

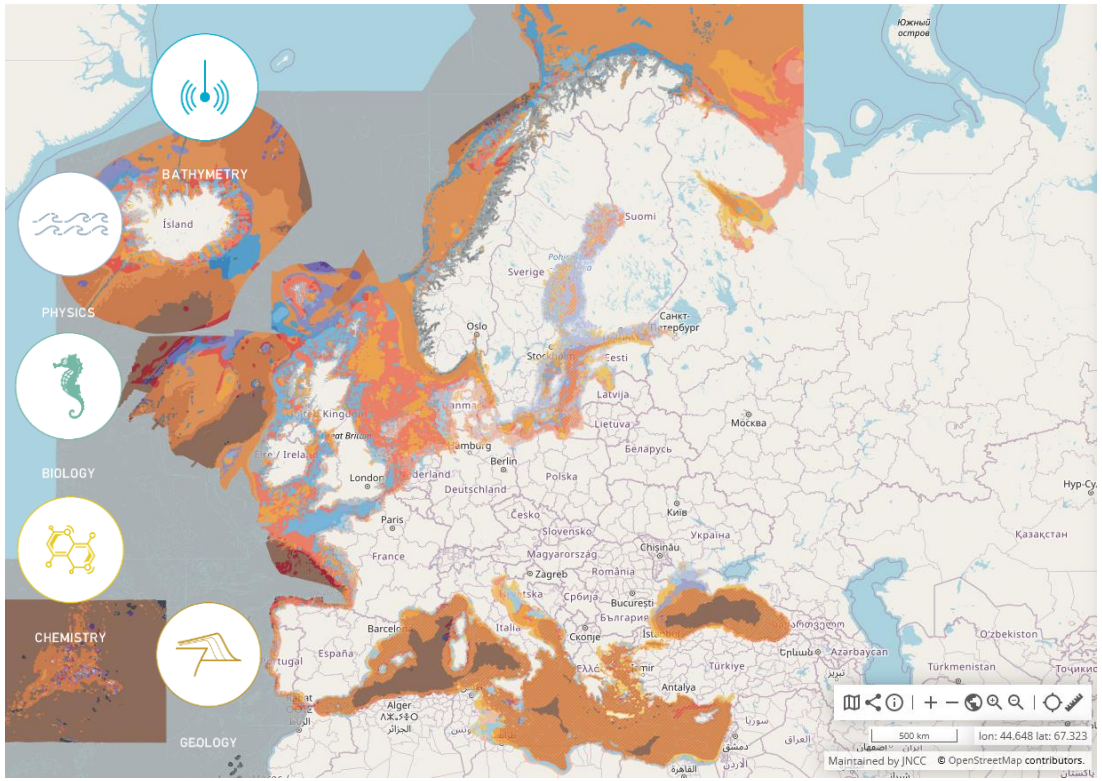
- **Analysis ready data to feed the models and applications in the DTO faster**

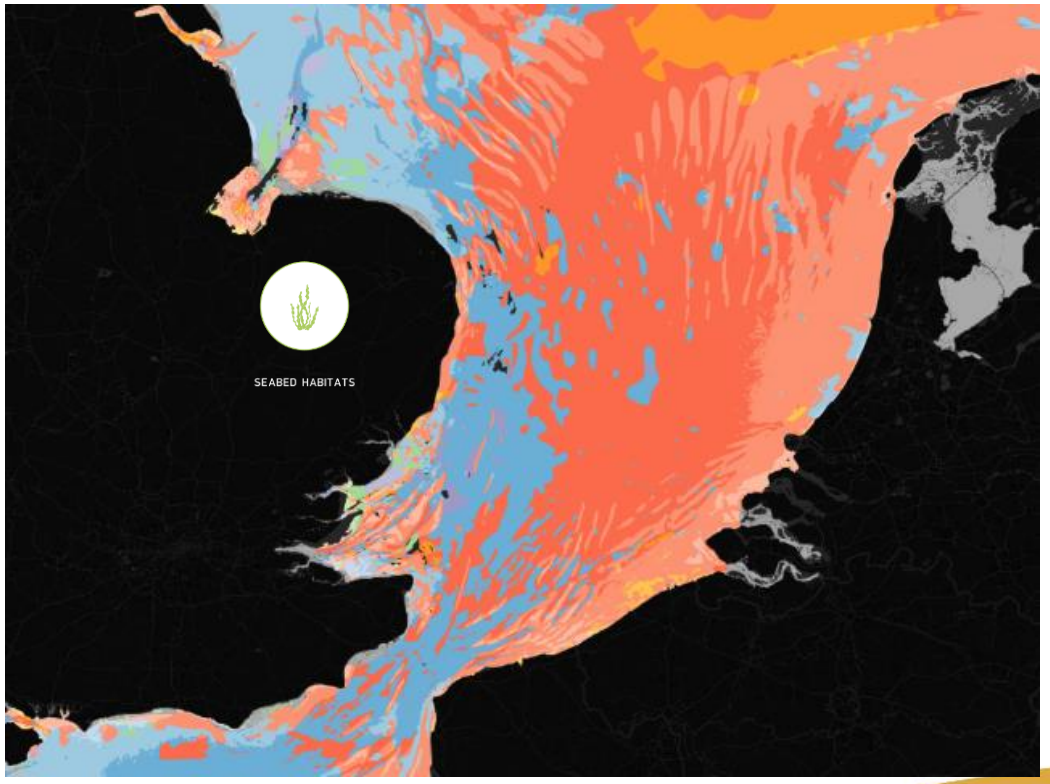




Future directions for EMODNET to power DTO applications

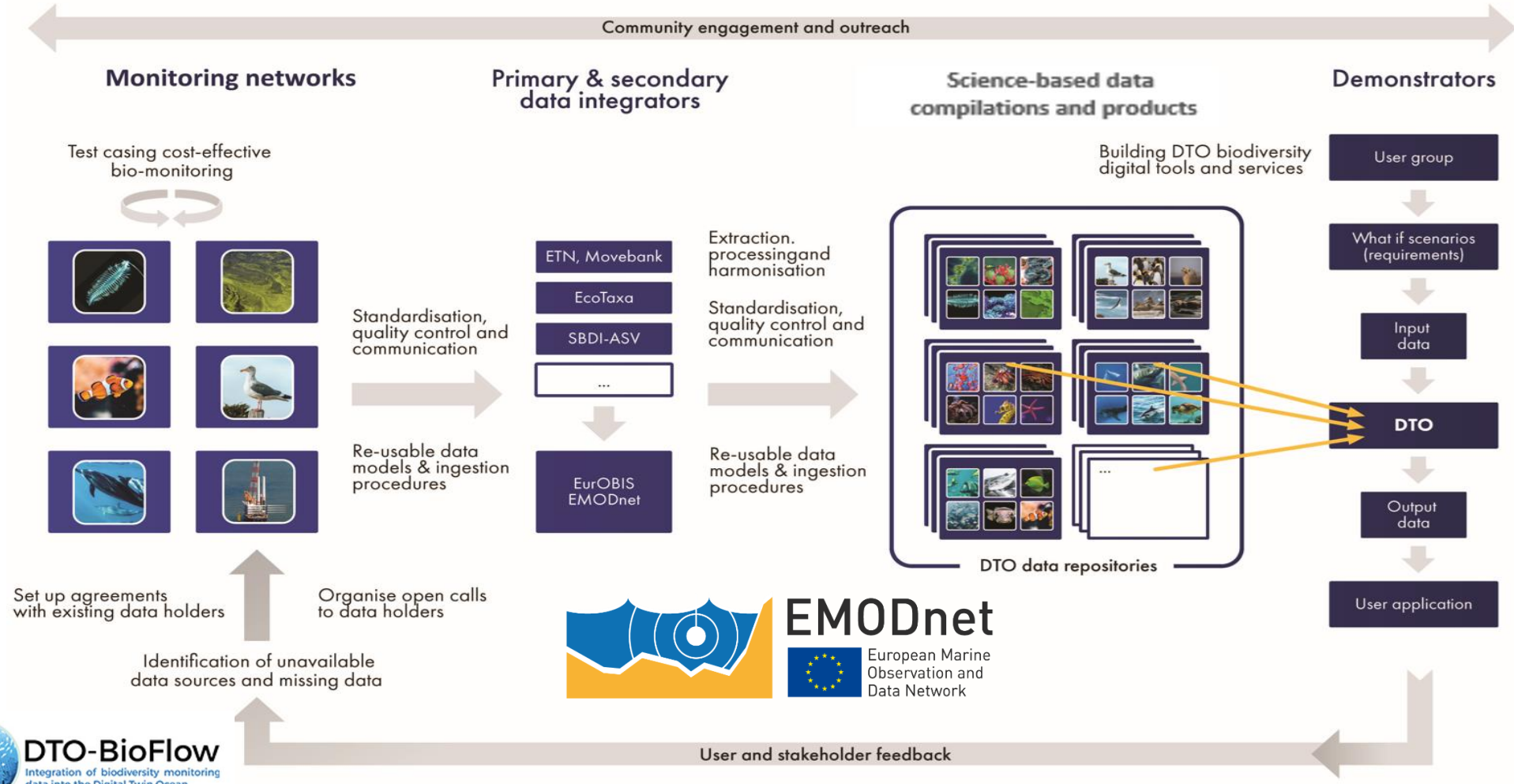
- Combined multidisciplinary data to answer more complex problems





Future directions for EMODNET to power DTO applications

- Near real time ecosystem data to monitore impact and validate predictions



DTO-BioFlow
Integration of biodiversity monitoring data into the Digital Twin Ocean

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Thank you for your attention

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Stay up-to-date with the latest news

The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and its predecessor, Regulation (EU) No. 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.