INTEGRATED MARINE DEBRIS OBSERVING SYSTEM

The value of engaging IMDOS with GOOS Regional Alliances

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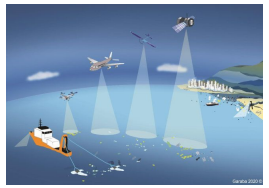
GRA Forum
9 April 2024, Barcelona, Spain

IMDOS as a joint initiative of

In collaboration with among others:

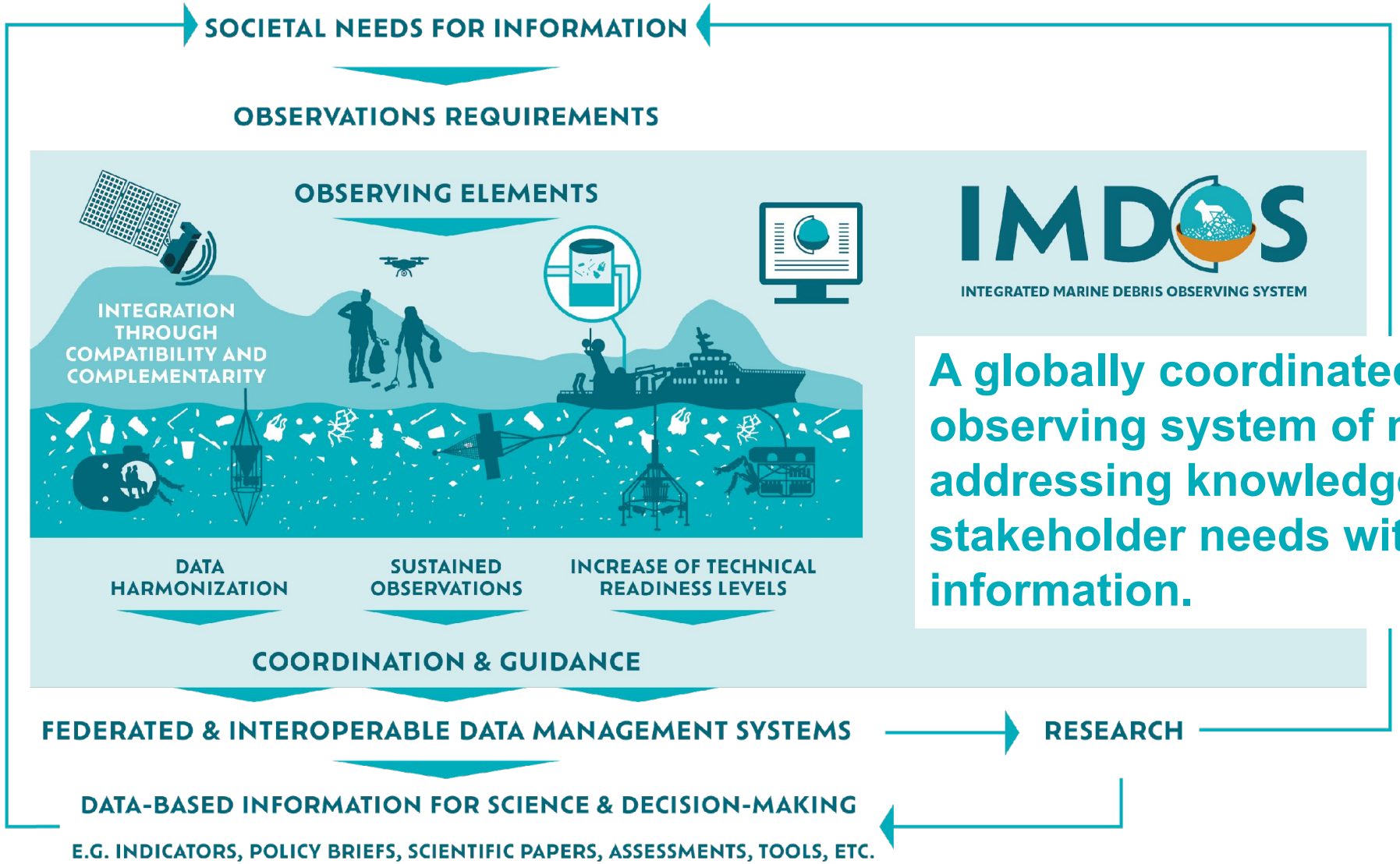


Initial support through:

Funded by the European Union

IMDOS

IMDOS endorsed as a GOOS Project in 2023



IMDOS
INTEGRATED MARINE DEBRIS OBSERVING SYSTEM

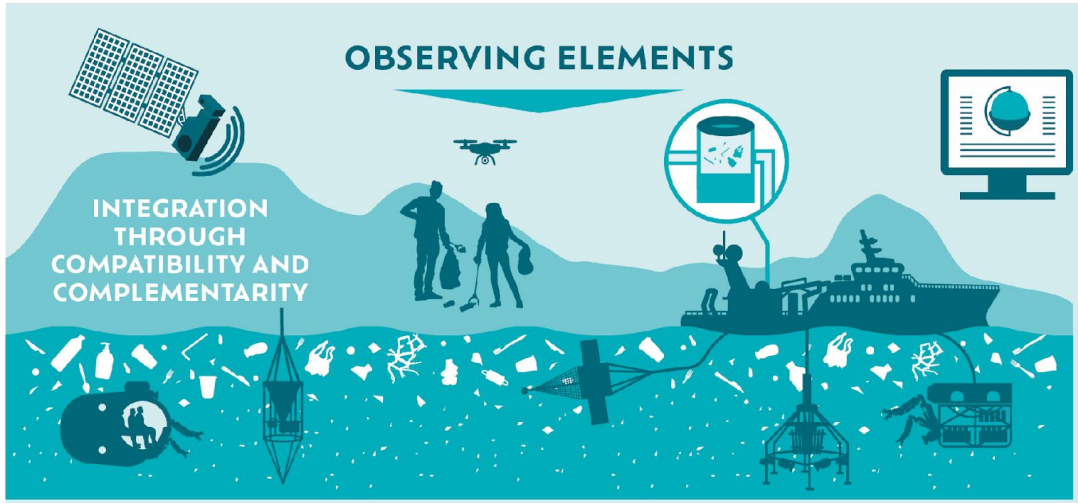
Vision

A globally coordinated and sustained observing system of marine debris addressing knowledge gaps and diverse stakeholder needs with adequate data and information.

IMDOS Strategy Document
available from www.imdos.org

SOCIETAL NEEDS FOR INFORMATION

OBSERVATIONS REQUIREMENTS



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DATA HARMONIZATION

SUSTAINED OBSERVATIONS

INCREASE OF TECHNICAL READINESS LEVELS

COORDINATION & GUIDANCE

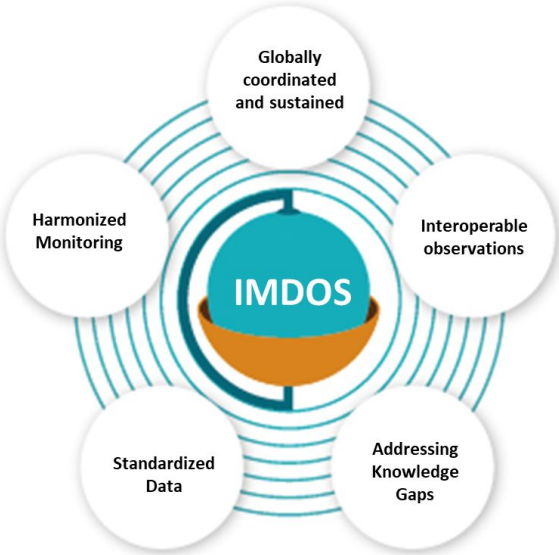
FEDERATED & INTEROPERABLE DATA MANAGEMENT SYSTEMS → RESEARCH

DATA-BASED INFORMATION FOR SCIENCE & DECISION-MAKING

E.G. INDICATORS, POLICY BRIEFS, SCIENTIFIC PAPERS, ASSESSMENTS, TOOLS, ETC.

Mission

Provide coordination and guidance to lead the marine debris community in establishing a sustained global observing system.



Strategic Objectives

How can IMDOS better engage with GRAs?

(a few examples)

Provide recommendations for the design and evolution of the observing system for marine debris.

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Version: 1.0 - April 2022

Essential Ocean Variable Specification Sheet

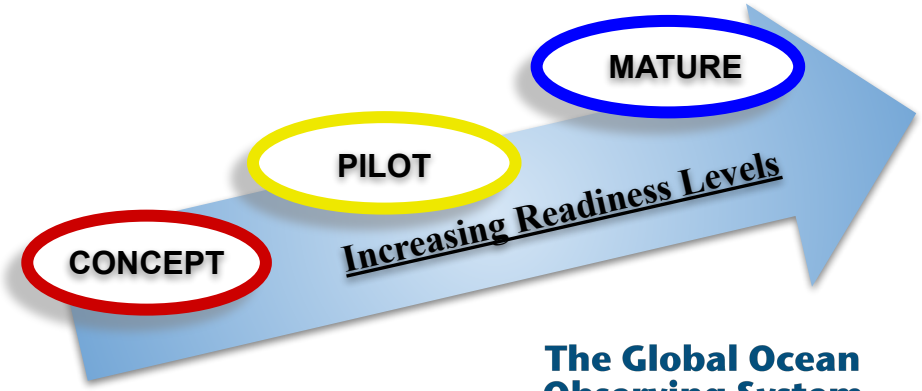
NEW

Marine Plastics Debris

Name of EOV	Marine Plastics Debris
EOV sub-variables	• beach litter: abundance per type & size category • floating microplastics: abundance, weight • floating macroplastics: abundance • seafloor litter: abundance per type & size class (macro, micro) *Additional sub-variables under consideration:* • Macroplastics in biota (ingestion by seabirds, fish, sea turtles) • Microplastics in biota (ingestion by seabirds, bivalves)

- Based on GESAMP WG40 recommendations for global scale monitoring
- Setting globally-negotiated requirements for what to observe, when, where and how; estimates of readiness levels

  → **guidance for GRAs to ensure compatibility of regional marine debris surveys within a developing global construct**
  → **collect feedback through GRAs on the adequacy of these requirements**



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The Global Ocean Observing System

GOOS

How can IMDOS better engage with GRAs?

Promote the development of a global network of marine debris observations

Promote the use of harmonized sampling protocols, common metadata & data requirements

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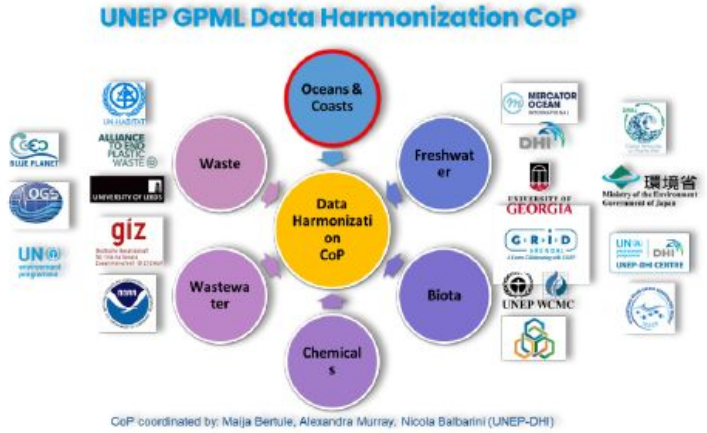
Outcome: International Workshop on Marine Debris Data Harmonization 2023

OUTCOME:

- **A coordinated network** of ocean surface microplastic data providers initiated under the auspices of GOOS and IMDOS, with an agreement to adhere to agreed common sampling protocol and metadata and data requirements.
- **Draft metadata and a data requirements sheet** based on the data sheet provided by MOE Japan, the European Marine Observation and Data Network (EMODnet), and NOAA National Centers for Environmental Information (NCEI), and any other potential large data integrators.
- **Recommendations for standardized metadata and data requirements for the UNEP** GPML Digital Platform data matrix.
- **Roadmap** towards a federated data management system for ocean surface microplastics and selected global-scale marine debris indicators.

●GPML: Global Partnership on Plastic Pollution and Marine Litter



●INC and Implementation on Plastic Pollution Treaty

https://geoblueplanet.org/international-marine-debris-data-harmonization-workshop/

How can IMDOS better engage with GRAs?

Jointly implement a federated and interoperable data management system.

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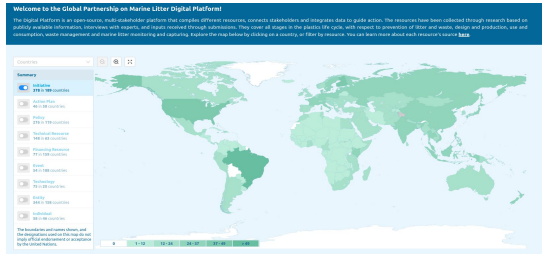
Towards a federated & interoperable data management system

GPML
UN environment programme
Global Partnership on Marine Litter



digital.gpmarinelitter.org

United Nations Educational, Scientific and Cultural Organization
Intergovernmental Oceanographic Commission
IODE International Oceanographic Data and Information Exchange
ODIS
IH Ocean InfoHub

EMODnet European Marine Observation and Data Network
PONANT YACHT CRUISES & EXPEDITIONS
THE OCEAN RACE
環境省 Ministry of the Environment Government of Japan
oceaneye
Database
Network
Database
Database
Database
MARINEDEBRIS.ID
NOAA National Centers for Environmental Information
pemalm
ocean scan Marine litter database from Earth and space
IMOS Integrated Marine Observing System
CIOOS CANADIAN INTEGRATED OCEAN OBSERVING SYSTEM

How can IMDOS better engage with GRAs?

Engage and coordinate existing and new initiatives around marine debris observations and modelling.

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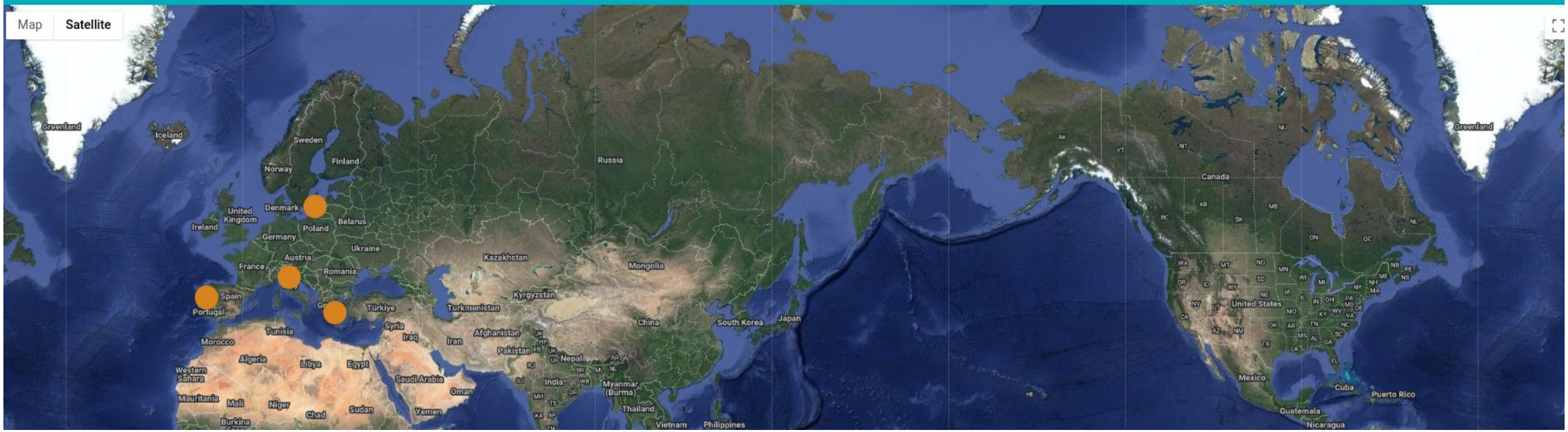
About IMDOS | Activities | Resources | News | Events | Contact

IMDOS DIRECTORY

The directory aims to showcase projects and initiatives that focus on marine debris observation.

Task Team | Project status | Marine Debris Domain | Search...



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Take-home message

Successful implementation of the IMDOS vision globally depends on how well we coordinate regional observing efforts, in close collaboration with the GRAs where relevant.

Addressing marine litter pollution requires regional implementation of globally accepted strategies, methodologies and data management solutions.

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THANK YOU