Towards a global, distributed, trusted, inclusive, and interconnected Ocean Data and Information Ecosystem
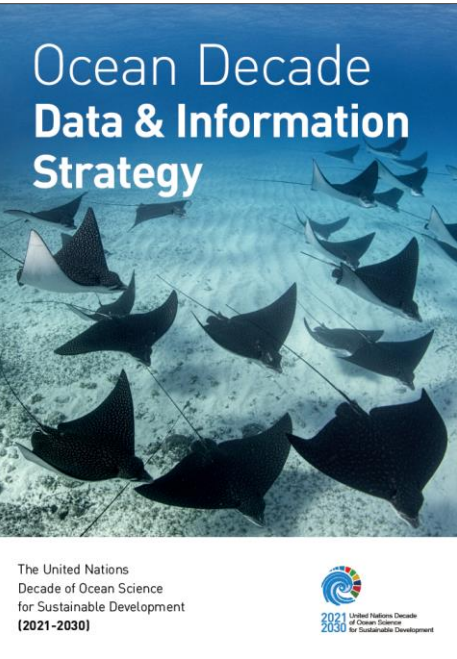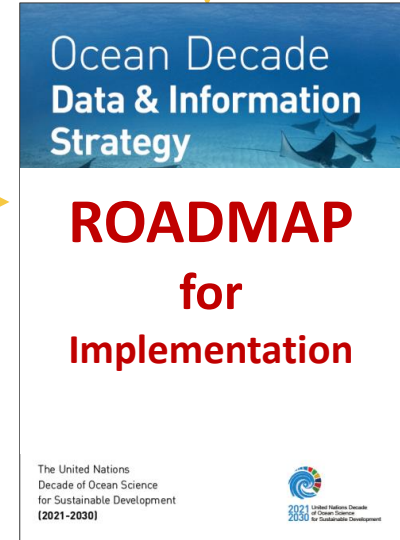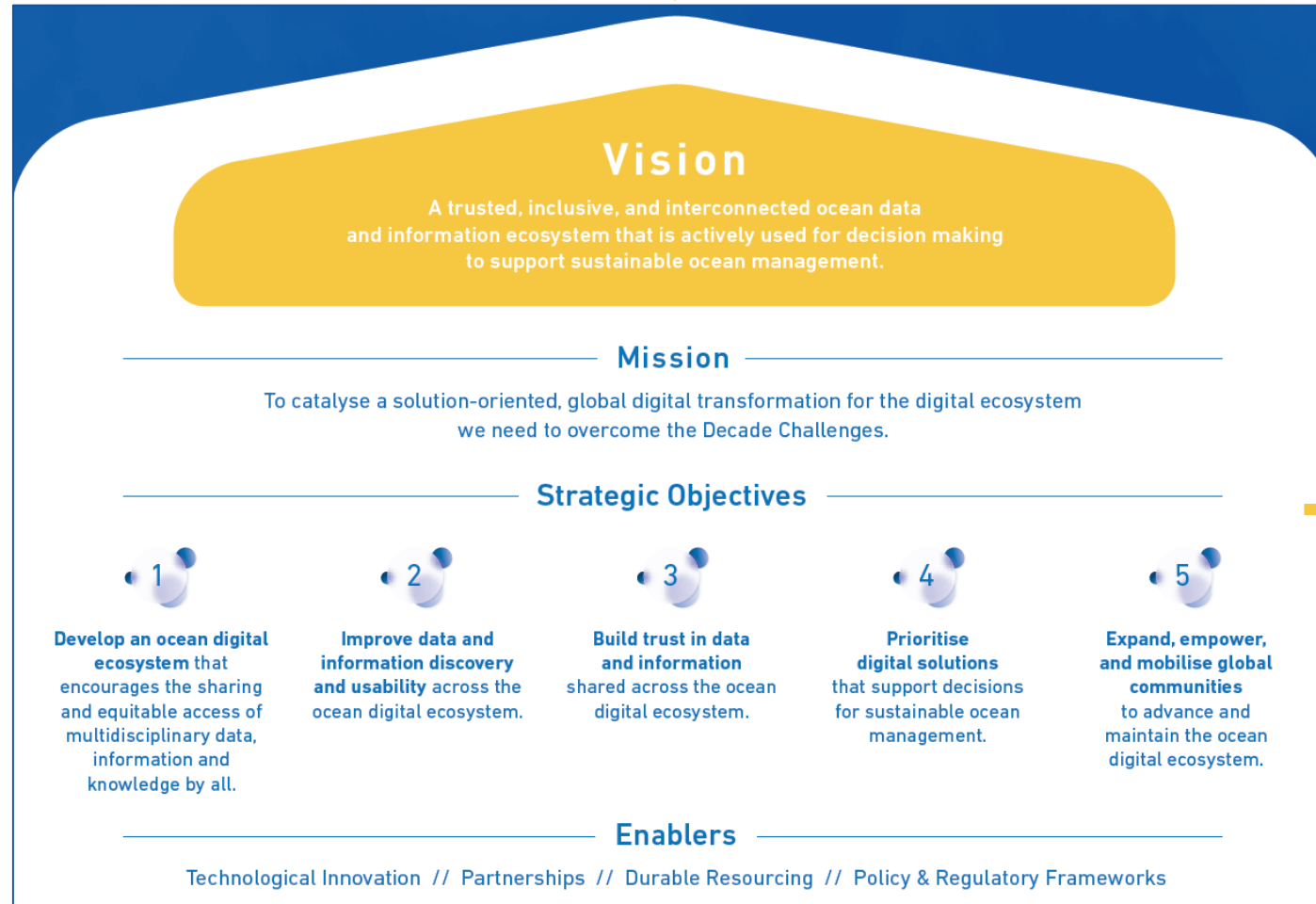
Data Coordination Group (DCG)
Develop a data & information strategy
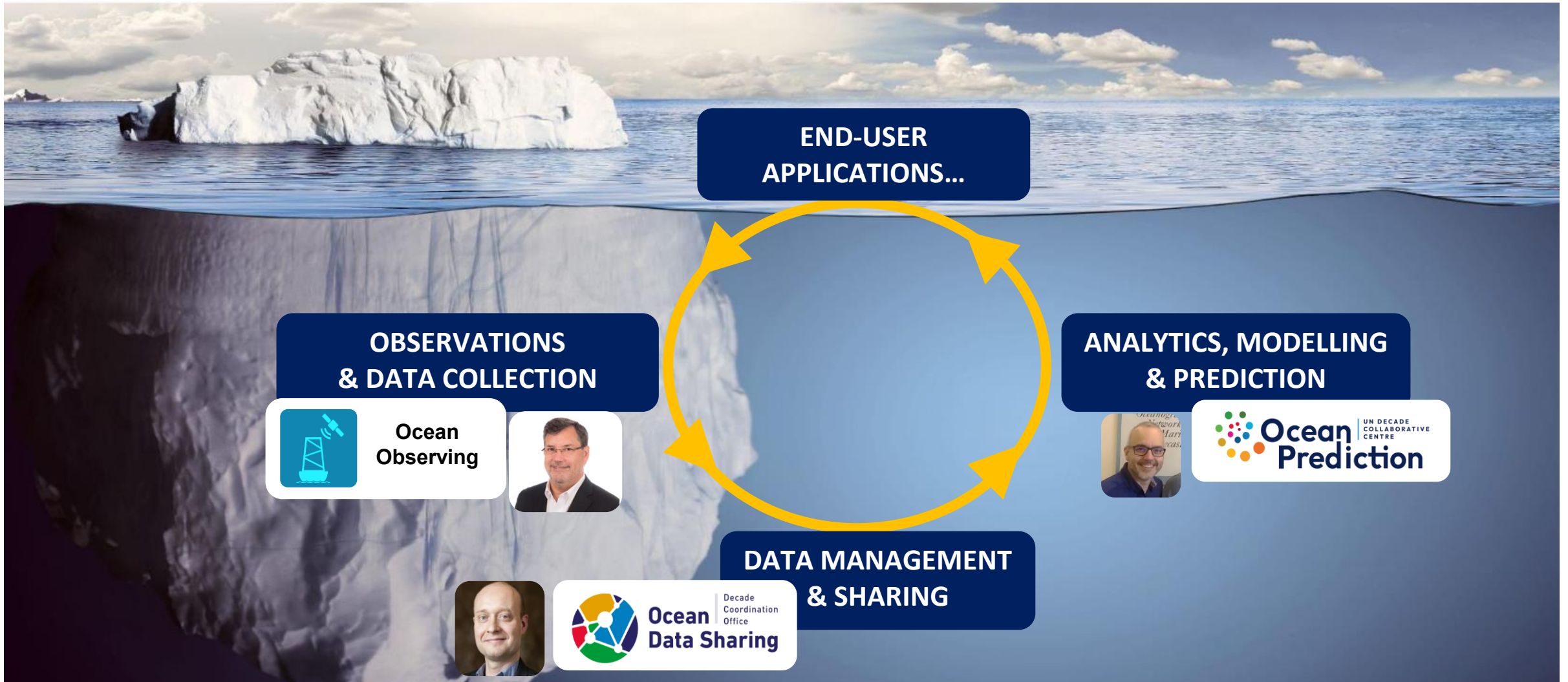
Data Strategy Implementation Group (DSIG)
Develop a roadmap for implementation of the data & information strategy

Ocean Decade
Data & Information Strategy

The United Nations Decade of Ocean Science for Sustainable Development (2021-2030)

Download here:

Vision
A trusted, inclusive, and interconnected ocean data and information ecosystem that is actively used for decision making to support sustainable ocean management.

Mission
To catalyse a solution-oriented, global digital transformation for the digital ecosystem we need to overcome the Decade Challenges.

Strategic Objectives

1 Develop an ocean digital ecosystem that encourages the sharing and equitable access of multidisciplinary data, information and knowledge by all.

2 Improve data and information discovery and usability across the ocean digital ecosystem.

3 Build trust in data and information shared across the ocean digital ecosystem.

4 Prioritise digital solutions that support decisions for sustainable ocean management.

5 Expand, empower, and mobilise global communities to advance and maintain the ocean digital ecosystem.

Enablers

Technological Innovation // Partnerships // Durable Resourcing // Policy & Regulatory Frameworks

Ocean Decade
Data & Information Strategy

ROADMAP
for
Implementation

The United Nations Decade of Ocean Science for Sustainable Development (2021-2030)

Lifting up the global digital ecosystem
critical components from observation to the end-users

END-USER APPLICATIONS...

OBSERVATIONS & DATA COLLECTION

Ocean Observing

ANALYTICS, MODELLING & PREDICTION

Ocean Prediction | UN DECADE COLLABORATIVE CENTRE

DATA MANAGEMENT & SHARING

Ocean Data Sharing | Decade Coordination Office

2021 2030 United Nations Decade of Ocean Science for Sustainable Development

unesco Intergovernmental Oceanographic Commission

Un Ocean Decade Vision 2030 Working Group 8

Challenge 8: Create a digital representation of the Ocean

Ocean Data Sharing | Decade Coordination Office

2021 2030 — United Nations Decade of Ocean Science for Sustainable Development

THE CO-CHAIRS

Jan-Bart **Calewaert**

Paula Cristina **Sierra-correa**

*Through multi-stakeholder collaboration, develop a **comprehensive digital representation of the ocean**, including a **dynamic ocean map**, which provides **free and open access to explore, discover and visualize data and information** on the past, current, and future state of the ocean.*

THE EXPERT MEMBERS
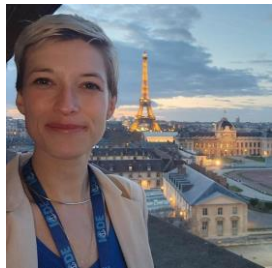
Ann-Christine **Zinkann**

Dick M.A. **Schaap**

Gerben J. **de Boer**

Toru **Suzuki**

Gustav **Kågesten**

Iain **Shepherd**

Tanya **Haddad**

Véronique **Jégat**

Kate **Crosman**

Marc **Taconet**

Martin **Visbeck**

Mike **Smit**

Ren **Xingyuan**

Peter Teye **Busumprah**

Steve **Hall**

Alain **Arnaud**

Vision 2030 Challenge 8
Digital representation of the Ocean

2021 2030 United Nations Decade of Ocean Science for Sustainable Development

unesco Intergovernmental Oceanographic Commission

Process towards a Strategic Ambition Setting for Challenge 8 White Paper

WHO ARE OUR USERS

Everyone - diverse in expertise & area, leave no one behind
- professional (hands on)
- professional (not hands on)
- non-professional/public
- **other 9 challenges are proxy users** defining data & info needs (both content & services)

WHAT DO THEY NEED?

- easy access to ocean data & information (multidisciplinary)
- tools/services for accessing and sharing data, information and knowledge

DIGITAL CONTENT NEEDS

All data types relevant

Focus on **priority data products & underpinning data**

Data-layers as drivers to pull in data
- Address data-gaps, agree on standards & improve interoperability
- Leverage existing communities
- Must be societally relevant (other challenges)
- Must be co-developed in a transparent process

Global layers must be **complemented with local case studies** (global south)

DIGITAL SERVICES NEEDS

1. Global Ocean **Data Discovery and Access Service**
2. Online user-friendly **Digital Atlas of the Ocean**
3. **Marine Knowledge exchange** mechanisms
4. **Help Desk** Service
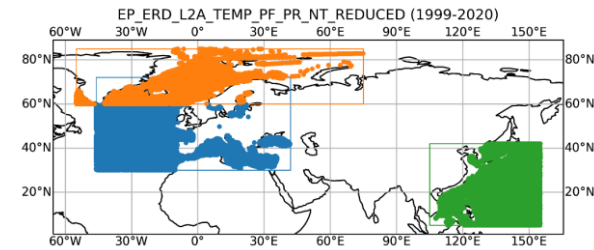5. **Capacity Development** / Sharing and **Training** facility
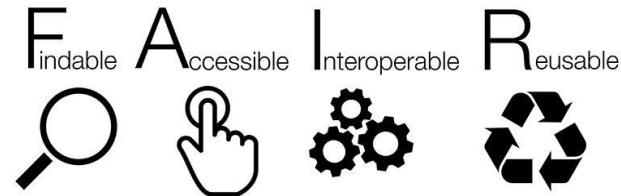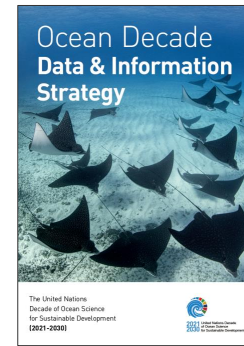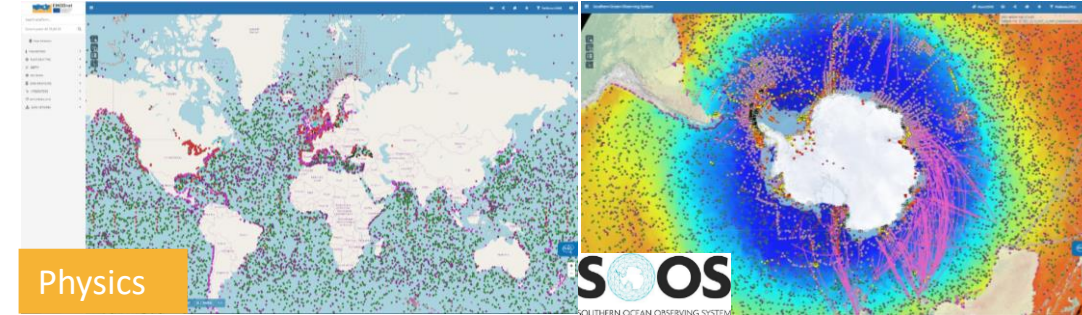
NEXT STEPS

- Agree on globally relevant data products: e.g., marine litter/pollution, MPAs, blue carbon,
- Elaborate service ideas, build on what exists / identify existing best practices
- Synergies with other WGs
- Incorporate feedback on strategic ambition
- Involve relevant Actions
- Draft White Paper

EMODnet as implementor of the Decade Data and Information Strategy

- EMODnet has **European and global remit**
  - *Thematic global coverage*
  - *Connecting to global data sharing initiatives and services*

- EMODnet is a **Decade Implementing Partner** (DIP)
  - *Co-develop/implement Data & Info Strategy*
  - *Contributes to key Decade Actions (Ditto, OD2030, OBPS)*
  - *Contributes to achieve Challenge 8 - A digital ocean*
  - *Support the efforts of the DCO-DataSharing*

- EMODnet **works with other regional services**
  - *Towards a global interoperable data sharing framework based on FAIR data principles and agreed standards for data, metadata and exchange*

Physics

SOOS — SOUTHERN OCEAN OBSERVING SYSTEM

Ocean Decade Data & Information Strategy

The United Nations Decade of Ocean Science for Sustainable Development [2021-2030]

DITTO — Digital Twins of the Ocean

World Base Layer Service (EBWBL)

Bathymetry

Findable Accessible Interoperable Reusable

EP_ERD_L2A_TEMP_PF_PR_NT_REDUCED (1999-2020)