The Vision of data, information and knowledge management for the Decade
The Ocean Decade Implementation Plan & Data

Julian Barbière, IOC/UNESCO
Head, Marine Policy and Regional Coordination Section / UN Ocean Decade focal point
Why an Ocean Decade?

“Humanity is running out of time to manage the ocean sustainably…”

2016 World Ocean Assessment
Ocean Decade: The framework for implementation

**Vision:** The science we need for the ocean we want

**Mission:** Transformative ocean science solutions for sustainable development, connecting people and our ocean.

oceandecade.org

Join the Ocean Decade Community

Join the Ocean Decade Community!

Connect

Connect with your peers, share information, support local and international efforts, and be mentored by local and international leaders.

Transform

Transform the future of ocean science and sustainable development by gaining your expertise in collaborating with world-renowned ocean science leaders.

Support

Support Transformations with a focus on sustainability at the local, national, regional and global scale.

framework

solutions

transformative

knowledge

data

ECPs

diversity

SIDs

LDCs

science

inclusive

capacity

co-design

funding

2030 Agenda & Regional and Global Policy Frameworks

DECADE OUTCOMES

“The Ocean We Want”

OCEAN DECADE CHALLENGES

The most immediate and pressing needs of the Oceans, Challenges may evolve throughout the Decade and new Challenges will be added. Each Challenge contributes to one or more Decade outcomes.

DECADE OBJECTIVES

The steps in the process from the ocean we have to the ocean we want. Objectives are relevant to all Challenges. Prioritisation and translation of objectives into Actions will vary depending on context.

DECADE ACTIONS

The tangible initiatives and endeavours that will be implemented by a wide range of Decade stakeholders to fulfil the objectives and thus achieve the Challenges.
• A **clean** ocean
• A **healthy and resilient** ocean
• A **productive** ocean
• A **predicted** ocean
• A **safe** ocean
• An **accessible** ocean
• An **inspiring and engaging** ocean
Ocean Decade Action Framework

**Call for Decade Actions No. 01/2020**

- **31 global programmes**
- **38 in-kind or financial contributions**
- **83 projects populating programmes**
- **10 UN led Decade Actions**
- **> 350 Decade Activities**

**Ocean Decade Challenges**
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**Decade Objectives**
The steps in the process from the ocean we have to the ocean we want. Objectives are relevant to all Challenges. Prioritisation and translation of objectives into Actions will vary depending on context.

**Decade Actions**
The tangible initiatives and endeavours that will be implemented by a wide range of Decade stakeholders to fulfil the objectives and thus achieve the Challenges.

- **Observations & prediction**
- **Multiple ocean stressors**
- **Deep sea / mesopelagic management**
- **Coastal resilience**
- **Fisheries**
- **Cultural values / OL**
- **Regional programmes**
- **Cross-cutting initiatives**
Observing

Understanding

Predicting

Integrated Ocean Management/Policies

Capacitating
What do we need?

- Better **understanding** of the whole ocean system
- Delivery of **timely information** about the state of the ocean (past, present, future)
- Break data silos and create incentives for data sharing
- Engage **industry** and foster **public-private partnerships** in ocean observing, data distribution, and information product delivery
- Influence the development of **data policies, infrastructure, architecture systems**, and **emerging data technologies**
- Address **major disparities in the capacity** around the world to access, collect, manage, and transform data into knowledge products and services
- **Democratize access, contribution to and use of ocean data products** (from satellites to smartphones)
Data Vision of the Implementation Plan

Aims to create a shared multidisciplinary digital representation of the ocean’s socio-environmental system, i.e. ‘a shared digital ecosystem of the ocean’ that links knowledge generators to users.

• Embrace a culture of timely, free and open access, use, and re-use of data, information and knowledge.
• Interlink resources that are quality controlled and traceable.
• Create new opportunities for participation of non-traditional ocean science actors including industry and local and indigenous knowledge holders.
• Are responsive to user needs through proactive engagement and co-development.
• Are capable of being used and contributed to by a wide range of stakeholders, including those in low-technology environments.
• Champion and promote interoperability across scales.

“No single system will be able to implement the vision for data management under the Decade. Data, information and knowledge management will be a collective effort that increases coordination between actors.”
Principles of Ocean Decade Data Ecosystem

Ocean Decade vision => collective development of a distributed, robust, and collaborative “digital ecosystem” of interoperating parts, that leverages open, scalable, easily implementable, and responsive digital management frameworks.

This system will:

• Support a complete understanding of marine social-ecological systems **drawing from historical data, contemporary data** (including real-time data streams), and **modelled data** to help predict future ocean conditions.

• Be constructed to **contribute to the identification and fulfilment of knowledge gaps**

• **Embrace non-quantifiable forms of knowledge and diverse knowledge paradigms**—including indigenous and local knowledge, to contribute to the digitised evidence base.

• Be designed to **overcome existing barriers**—including a lack of digitisation capacity, data fragmentation, siloing of data, lack of data sharing, and hidden or underexploited datasets.
Where do we start from?

- Identify **challenges and barriers**, regional & community needs and priorities
- Data needs to achieve **Decade Challenges** (across value chain)
- Create **interfaces** between users and data community (eg Decade Community of Practice)
- Build on **exiting international efforts** (infrastructure, initiatives, eg IODE ODIS, Ocean Best Practices, DITTO)
- Contribute to Data focused **Decade Actions** and guide the design of call for actions
- Assess **resource needs** (Decade Alliance, Philantropy)
- What does **success** looks like? In 2, 5, 10 years (need metrics/reporting)

- **Contribute to the work of the Decade Data Coordination Group!**
Thanks to all Decade partners!!

And many others that have contributed in-kind support...

The Ocean We Need for Future We Want

United Nations Decade of Ocean Science for Sustainable Development