Overall scope of UN Ocean Conference: "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions".

Event Co-organisers: Fugro, European Marine Observation and Data Network (EMODnet), IOC-UNESCO and International Oceanographic Data and Information Exchange (IODE) programme, Intertidal Agency, Mercator Ocean International, Flanders Marine Institute (VLIZ)

Event webpage and registration: https://emodnet.ec.europa.eu/en/UN-Ocean-Conference-SideEvent-MarineDataInteroperability

Synopsis

The United Nations Decade of Ocean Science for Sustainable Development (Ocean Decade) is providing a convening framework for diverse stakeholders to co-design and co-deliver solution-oriented research needed to achieve and maintain a clean, healthy and resilient, productive, predicted, safe and accessible Ocean in support of the UN 2030 Agenda. The Objectives of the Ocean Decade are particularly relevant for, but not limited to, Sustainable Development Goal 14, i.e. to Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The digitisation, sharing, and management of data, information and digital knowledge are cornerstones for the success of the Ocean Decade and by extension a successful implementation of Goal 14. For this reason, the Decade implementation plan calls upon the Ocean community to rally their capacities to collectively co-design and construct a distributed digital data and information ecosystem capable of: (i) holistically representing the complex socio-ecological ocean system at global, regional or local scales; and (ii) representing the ocean's role in sustainable development across scales. Stakeholders must be able to access, use, and contribute to this digital ecosystem through multiple interfaces tailored to their needs and capacities. No one system or central infrastructure will be able to implement the vision above; instead, stakeholders will need to contribute to the development of a distributed, robust, and

collaborative "digital ecosystem" of interoperating parts, that leverages open, scalable, easily implementable, and responsive digital management frameworks.

Given that there are already several independent, generally uncoordinated national, regional and international initiatives working in this area, it is critically important that a community of experts come together to share best practices, shed light on ongoing initiatives and ensure alignment of these efforts. This community must further develop a conceptual design of a data and information management framework that is it suitable for the marine domain and subsequently identify what is needed to fulfil that design, with a focus on data interoperability.

The implementation of the interoperable data and information framework to enable the envisaged digital marine knowledge ecosystem we need to address the Ocean Decade challenges and SDG 14, will require scaling up ongoing efforts through a partnership approach between all actors along the marine knowledge value chain.

This event will contribute to taking stock of the current progress, consider solutions to fill the gaps and requirements in the ocean data and information interoperability domain and plant the seeds for further partnerships to reach the vision objectives set for this aspect by the UN Ocean Decade, and as such directly resonates with the overall scope of the UN Ocean Conference: "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions".

Format: Two-hour hybrid webinar, with live speakers and moderators and remote audience, interactive Q&A and polls (Sli.do)

Key objectives

This side event will provide a high-level overview of current ocean data interoperability initiatives with key examples from around the world, share insights from these efforts and discuss how these can support the goals of the UN Decade of Ocean Science for Sustainable Development and contribute to achieving UN 2030 Agenda, and in particular SDG14. The sessions will build upon and consider messages from previous events and activities related to marine data interoperability. It will connect and bring together representatives of these initiatives as well as experts and interested stakeholders from the marine, maritime and wider environmental community to:

- Share and exchange latest information on existing and emerging ocean data and information interoperability initiatives worldwide to take stock the current status;
- Highlight contributions of marine data, information and knowledge services for SDG14 and wider UN 2030 Agenda;
- Assess existing best practices in data policies, terms of use and interoperability; gather lessons learned from past, ongoing and planned projects, programmes and initiatives; identify solutions for known problems and bottlenecks;
- Discover and explore the role and responsibility of major existing marine data acquisition, management, processing and sharing initiative at the regional and global level to achieving a fully interoperable global ocean data ecosystem, as a direct contribution to the UN Decade of Ocean Science for Sustainable Development;
- Collect community feedback on shaping the UN Ocean Decade Data Coordination Group Strategy.

Prepared by Fugro, EMODnet, IOC-UNESCO, IODE, Intertidal Agency, Mercator Ocean International and VLIZ.

Programme

Meeting Chairs: Kate Wing (Intertidal Agency, UN Ocean Decade Data Coordination Group Co-Chair) and Jan-Bart Calewaert (EMODnet Secretariat, UN Ocean Decade Data Coordination Group Co-Chair)

- **Introductions & opening remarks** - 5'
  Jan-Bart Calewaert (EMODnet Secretariat, UN OD DCG Chair)

- **Round-Table 1: Current marine data management and sharing capability, examples of regional and sectoral interoperability** - 40'

  Round-Table Moderator: Pier Luigi Buttigieg (Helmholtz Metadata Collaboration & GEOMAR)

  Speakers and contributions:
  - EMODnet examples of EU regional interoperability with global impact (ocean acidification, UN Global Partnership on Marine Litter, UNESCO-IOC's Ocean Biodiversity Information System (OBIS) and Seabed 2030 initiative) - *Kate Larkin (EMODnet Secretariat), confirmed*
  - Data collection, management and sharing: an offshore industry perspective *Ben Williams (FUGRO), confirmed*
  - The Australian Ocean Data Network (AODN) and Integrated Marine Observing System (IMOS) - *Sebastien Mancini (Director of the AODN) confirmed*
  - Marine Information Management System at the South African Department of Forestry, Fisheries and the Environment, DFFE - *Tshikana Rasehlomi (DFFE), confirmed*
  - Perspectives from Pacific Small Island Developing States - *Hans Wendt, Marine Program Coordinator, International Union for Conservation of Nature (IUCN), Fiji confirmed*

  Q&A with audience - 10'

- **Break and Panel Switch** – 10' with two invited ***3' video contributions***:
  - Science Data Integration, World Ocean Database and other examples of successful interoperability solutions for data exchange - *Kevin O'Brien (National Oceanic and Atmospheric Administration, US) confirmed*
  - Expanding international ocean data exchange and interoperability in the Western-Pacific area, *Dr. Shi Suixiang*, National Marine Data and Information Service (NMDIS) of China, Project Coordinator of ODIN-WESTPAC *confirmed*

- **Round Table 2: Scaling up marine data and information interoperability for the Ocean Decade and implementation of UN 2030 Agenda SDG 14: future look and recommendations** - 40'

  Round-Table Moderator: Louis Demargne (Data & Knowledge Management Officer, IOC-UNESCO Ocean Decade Coordination Unit)

Prepared by Fugro, EMODnet, IOC-UNESCO, IODE, Intertidal Agency, Mercator Ocean International and VLIZ.

Speakers and contributions:

- ▪ Scaling up data management practices to support of global data exchange platforms, *Lucy Scott, IODE, Ocean InfoHub (OIH) and Ocean Data and Information System (ODIS), confirmed*
- ▪ Data requirements and challenges ramping up data and information management for the Global Environment Monitoring System for the Ocean and Coasts (GEMS Ocean) Programme - *Hartwig Kremer (UNEP) confirmed*
- ▪ Scaling up from a national perspective - *Telmo Carvalho (Ocean Office, Portuguese Institute for Sea and Atmosphere IPMA) confirmed*
- ▪ Scaling up for a Predicted and Digital Ocean - *Pierre Bahurel (Mercator Ocean International, Copernicus Marine Service), confirmed*
- ▪ Data collection, management and sharing – a regional perspective – *Arlene Laing (Coordinating Director of Caribbean Meteorological Organization) confirmed*

Q&A with audience - 10'

- ● **Closing remarks** - 10'
    - o **Julian Barbière (UNESCO-IOC Ocean Decade Coordination Unit)**
    - o **Ann-Katrien Lescrauwaet (Flanders Marine Institute, VLIZ)**
    - o **Meeting co-chair Kate Wing (Intertidal Agency, UN OD DCG Co-Chair)**

End of Side Event

Representatives from the Organizing Committee: Kate Wing (Intertidal Agency, UN Ocean Decade Data Coordination Group Co-Chair) and Jan-Bart Calewaert (EMODnet Secretariat, UN Ocean Decade Data Coordination Group Co-Chair), Kate Larkin (EMODnet Secretariat), Pier-Luigi Buttigieg (Helmholtz Metadata Collaboration, GEOMAR), Taco De Bruin (NIOZ, IODE Co-Chair), Louis Demargne (Data and Knowledge Officer, UNESCO-IOC Ocean Decade Coordination Unit), David Millar (Fugro), Peter Pissierssens (UNESCO IODE), Lucy Scott (UNESCO IODE), Ann-Katrien Lescrauwaet and Joana Beja (VLIZ), Pierre Bahurel (Mercator Ocean international, MOi).

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