

# **Marine Environmental Data and Information Network (MEDIN)**

## **Global data initiatives relevant to the UK marine sector – a MEDIN summary**



***‘Measure once, use many times’***

This document gives a summary of global data and information initiatives in the marine domain and describes the relationship the initiative has with the MEDIN partnership.

**Contributors:**

Version 1.0 February 2026	Authors: Charlotte Miskin-Hymas, Gaynor Evans, Reviewers: Clare Postlethwaite, Lesley Rickards, Mark Hebden

**Format:**  
Microsoft Word

**Contents**

**1 INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC) .....3**

**2 INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES) .....4**


**3 OSPAR COMMISSION.....6**

**4 ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) .....7**

**5 INTERNATIONAL HYDROGRAPHIC ORGANISATION (IHO).....8**


**6 WORLD METEOROLOGICAL ORGANISATION (WMO).....9**

**7 GLOBAL OCEAN OBSERVING SYSTEM (GOOS) ..... 11**

1 Intergovernmental Oceanographic Commission (IOC)	
<b>What are the aims of the initiative?</b>	<p>The Intergovernmental Oceanographic Commission of UNESCO (<a href="#">IOC/UNESCO</a>) promotes international cooperation in marine sciences to improve management of the ocean, coasts and marine resources. The IOC coordinates the United Nations Decade of Ocean Science for Sustainable Development 2021-2030, the “Ocean Decade”.</p> <p>IOC carries out work to promote the efficient distribution and use of oceanographic data and information through its International Oceanographic Data and Information Exchange (<a href="#">IODE</a>) Programme.</p> <div style="text-align: right;">  <p>Intergovernmental Oceanographic Commission</p> </div>
<b>Who is driving the initiative?</b>	UNESCO
<b>Status of implementation</b>	<p>IOC was established in 1960 as an autonomous body within UNESCO and is fully operational.</p> <p>The IODE Programme was established in 1961, a year after IOC was formed. It is a “primary subsidiary body” of IOC, meaning that it has a certain amount of autonomy but reports decisions and recommendations to IOC. It has been operational since inception. The IOC Project Office for IODE was established in 2005 and acts as the Secretariat for IODE.</p>
<b>What is the legislative status?</b>	<p>No legislative commitment identified.</p> <p>The IOC Statutes were revised in 1999. “The Intergovernmental Oceanographic Commission, hereafter called the Commission, is established as a body with functional autonomy within the United Nations Educational, Scientific and Cultural Organization (UNESCO)”, see: <a href="#">UNESCO Executive Board Decisions (157 EX)</a> and <a href="#">Revised Statutes 30 C/58</a>.</p>
<b>Thematic and Spatial scope</b>	IODE interests cover all marine and oceanographic data and information on a worldwide basis.
<b>Does it consider raw data or interpreted information?</b>	Raw data, products, information and capacity building.
<b>Is data/ information managed centrally or distributed?</b>	<ul style="list-style-type: none"> <li>• The IODE Programme coordinates a global network of more than 100 National Oceanographic Data Centres (NODCs) and Associate Data Units (ADUs): a distributed system.</li> <li>• The major work of IODE comprises three “Programme Components”:</li> <li>• The <a href="#">Ocean Biodiversity Information System (OBIS)</a> which emanates from the Census of Marine Life (2000-2010) and was adopted as an IODE project in 2009.</li> <li>• The <a href="#">Ocean Data and Information System (ODIS)</a>, a federation of systems that use common standards and conventions to share and exchange their (meta)data. The IOC Assembly in 2021 formally established the ODIS, ensuring its long-term support as a stand-alone project. Pre-cursors of ODIS are <a href="#">Ocean InfoHub</a> (OIH) and the <a href="#">ODIS “Catalogue of Sources”</a>.</li> <li>• The <a href="#">Ocean Teacher Global Academy (OTGA)</a> provides a comprehensive internet-based training platform that supports classroom training, blended training and online (distance) learning, and supports the implementation of the IOC Capacity Development Strategy.</li> <li>• Other notable activities include the <a href="#">World Ocean Database (WOD)</a>, a product of NOAA's National Centers for Environmental Information (NCEI) and the <a href="#">Ocean Best Practices System (OBPS)</a> jointly sponsored by IODE and the <a href="#">Global Ocean Observing System (GOOS)</a>. IODE collaborates with other IOC programmes where data and information are involved.</li> </ul>

	<ul style="list-style-type: none"> <li>IOC collaborates with <a href="#">the International Hydrographic Organization (IHO)</a> on the <a href="#">General Bathymetric Chart of the Ocean (GEBCO)</a>.</li> </ul>
<b>How is the management of the initiative structured?</b>	<p>The IOC consists of an Assembly, an Executive Council, a Secretariat and such subsidiary bodies it may establish. The Secretariat is led by the Executive Secretary, who is also an Assistant Director-General of UNESCO. The Assembly comprises IOC's 150 Member States.</p> <p>The governing body for IODE is the <a href="#">IODE Committee</a>. Between Committee meetings progress monitoring is by the IODE Management Group. Programme Components and Activities are guided by Steering Groups. Time limited Working Groups may be established. Steering and Working Groups report to the IODE Committee and/or the Management Group.</p>
<b>Who is involved or leads in the UK?</b>	<p>The British Oceanographic Data Centre (BODC), a data facility of the National Oceanography Centre (NOC), represents the UK on IODE as the National Coordinator for Ocean Data Management and acts as the NODC. BODC is supported by MEDIN, DASSH and Cefas (all ADUs).</p>
<b>How does it link to the other initiatives?</b>	<p>As IODE is global and in specific fields, strong links to the European initiatives are not required, however many participants in the European initiatives also participate in IODE. IODE has had close links with the ICES Data Centre for many years. Other links include: EMODnet, European Commission - DG Maritime Affairs and Fisheries (DG MARE), IHO, OSPAR and WMO.</p>
<b>What is MEDIN's input to these initiatives</b>	<ul style="list-style-type: none"> <li>For IODE, BODC is the lead with MEDIN representation also.</li> <li>MEDIN's digital system is part of ODIS and MEDIN has thus become a partner in the ODIS Federation.</li> <li>MEDIN utilizes the OTGA platform for training courses.</li> <li>DASSH is the UK node for OBIS.</li> <li>IODE have adapted the MEDIN accreditation criteria for their network of NODCs and ADUs.</li> </ul>
<b>What does this mean for UK policy?</b>	<p>Ensuring that relevant outputs from the IODE are used and policies, in particular the <a href="#">IOC Data Policy and Terms of Use (2023)</a>, are adhered to.</p>
<b>Links and suggested contact point</b>	<p><a href="#">IOC</a>: Alan Evans (NOC) (<a href="mailto:alan.evans@noc.ac.uk">alan.evans@noc.ac.uk</a>) is the UK point of contact.  <a href="#">IODE</a>: Mark Hebden, BODC (<a href="mailto:mahe@noc.ac.uk">mahe@noc.ac.uk</a>) leads for the UK.          Other contacts are: Clare Postlethwaite (MEDIN), <a href="mailto:cfpo@noc.ac.uk">cfpo@noc.ac.uk</a>, Dan Lear (DASSH) <a href="mailto:dbler@mba.ac.uk">dbler@mba.ac.uk</a> and Laura Hanley (Cefas), <a href="mailto:laura.hanley@cefass.co.uk">laura.hanley@cefass.co.uk</a>.</p>


## 2 International Council for the Exploration of the Sea (ICES)

<b>What are the aims of the initiative?</b>	<p>ICES mission is to advance and share scientific understanding of marine ecosystems and the services they provide and to use this knowledge to generate state-of-the-art advice for meeting conservation, management, and sustainability.</p> <p>ICES is an intergovernmental marine science organization, meeting societal needs for impartial evidence on the state and sustainable use of our seas and oceans.</p>	
<b>Who is driving the initiative?</b>	<p>Originally born out of the need to collaborate because of concerns over declining fish stocks in the North Sea in the late 19<sup>th</sup> century. The Council is the principal decision and policy-making body of ICES and is comprised a President and two delegates appointed by each of the 19 Member Countries. ICES support a network of 6,000 experts from 700 institutes and organizations in the 19 member countries.</p>	
<b>Status of implementation</b>	<p>Established in 1902, ICES is the world's oldest intergovernmental science organization.</p>	
<b>What is the legislative status?</b>	<p>The Convention for the International Council for the Exploration of the Sea was signed in 1964 by Contracting Parties (member states).</p>	


<b>Thematic and Spatial scope</b>	ICES interests cover all marine data types. Spatially, ICES are principally concerned with the North Atlantic and Baltic Sea although they also hold data from a wider geographical area.
<b>Does it consider raw data or interpreted information?</b>	Both raw and interpreted data are collated and disseminated. Data are provided to ICES under the general provisions of the <a href="#">ICES data policy</a> . ICES rely on the provision of data to its Working Groups to further scientific understanding of ecosystem processes which then underpins management advice. The ICES Data Centre manages a number of large dataset collections which can be searched at <a href="#">ICES data portals</a> . ICES Advice related to the marine environment is located at <a href="https://www.ices.dk/advice/Pages/default.aspx">https://www.ices.dk/advice/Pages/default.aspx</a> .
<b>Is data/ information managed centrally or distributed?</b>	Data are managed centrally at the ICES Data Centre. Information are collated through international Working Groups and advice disseminated to many regulatory groups and governments.
<b>How is the management of the initiative structured?</b>	The <a href="#">Science Committee (SCICOM)</a> oversees all aspects of the scientific work at ICES, whilst the <a href="#">Advisory Committee (ACOM)</a> translates ICES science into advice on the sustainable use, provision of services and protection of marine ecosystems. Advice Drafting Groups and Operational Groups are within SCICOM and ACOM. The many Steering Groups and Expert Groups along with Strategic Initiatives and the Secretariat sit under these Committees.
<b>Who is involved or leads in the UK?</b>	The Marine Directorate of the Scottish Government (MDSG) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas) represent the UK on the ICES Council. Many UK scientists participate in the Expert Groups. Representatives from the British Oceanographic Data Centre (BODC), Cefas, MDSG and MEDIN sit on the Science Committee (SCICOM) Operational Group - <a href="#">Data and Information Group (DIG)</a> .
<b>How does it link to the other initiatives?</b>	<ul style="list-style-type: none"> <li>ICES and the OSPAR Commission have a <a href="#">Memorandum of Understanding (MoU)</a> that outlines their cooperation. ICES hosts and quality controls data collected by the OSPAR Coordinated Environmental Monitoring Programmes (CEMP). The CEMP collects data on contaminants in the North-East Atlantic from water, sediment, and biota. The UK submit data to CEMP by submitting to ICES first. The UK uses the Marine Environment Monitoring and Assessment National database V2.0 (MERMANT+) to do this. This is a database managed by BODC and owned and hosted by the Department of Environment, Food and Rural Affairs (Defra). MERMANT+ holds quality-assured marine environmental data, collected and uploaded into MERMANT+ by UK Competent Monitoring Authorities (CMAs) under the Clean Seas Environmental Monitoring Programme (CSEMP). As of 2024, zoobenthos abundance and biomass data held in MERMANT+ are also submitted to ICES.</li> <li>ICES is a major provider of observations to EMODnet Biology and EMODnet Data Ingestion and supports the work of EMODnet Physics and Chemistry. ICES contribute to EMODnet data standards and harmonization.</li> <li>ICES are involved with several UN Ocean Decade programmes and activities.</li> <li>ICES are an IODE Associate Data Unit (ADU)</li> <li>A list of global and regional organisations with which ICES has science cooperation agreements can be found at: <a href="https://www.ices.dk/about-ICES/global-cooperation/Pages/Scientific-cooperation.aspx">https://www.ices.dk/about-ICES/global-cooperation/Pages/Scientific-cooperation.aspx</a></li> <li>A strategic planning framework has been established specifically for the cooperation with <a href="#">the North Pacific Marine Science Organization (PICES)</a>, ICES sister organization in the North Pacific.</li> </ul>
<b>What is MEDIN's input to these initiatives</b>	MEDIN staff are involved in the ICES Data and Information Group (DIG).
<b>What does this mean for UK policy?</b>	UK reporting to OSPAR relies on data flows via ICES. The UK has an MoU with ICES (see: <a href="https://www.ices.dk/about-ICES/global-cooperation/Documents/UK-ICES_MoU_2025_signed_web.pdf">https://www.ices.dk/about-ICES/global-cooperation/Documents/UK-ICES_MoU_2025_signed_web.pdf</a> ) which outlines

	the advice and information ICES will provide to the UK on conservation, protection, the sustainable use of the marine environment, sustainable fisheries and aquaculture, as well as marine data. This information and advice will assist the UK in meeting its international and domestic commitments to achieve a sustainable marine environment, support vital ecosystems and improve fish stocks which will in turn also benefit our aquaculture and fishing industries.
<b>Links and suggested contact point</b>	<a href="http://www.ices.dk">http://www.ices.dk</a> Clare Postlethwaite ( <a href="mailto:cfpo@noc.ac.uk">cfpo@noc.ac.uk</a> ) /Mark Hebden ( <a href="mailto:mahe@noc.ac.uk">mahe@noc.ac.uk</a> ) Jens Rasmussen (SGMD) <a href="mailto:Jens.Rasmussen@gov.scot">Jens.Rasmussen@gov.scot</a> (past DIG chair) Laura Hanley (Cefas) <a href="mailto:laura.hanley@cef.co.uk">laura.hanley@cef.co.uk</a>

### 3 OSPAR Commission

<b>What are the aims of the initiative?</b>	Aims to protect and conserve the environment of the North East Atlantic	 <b>OSPAR</b> COMMISSION
<b>Who is driving the initiative?</b>	The OSPAR Convention entered into force on 25 March 1998 replacing the older Oslo and Paris Convention of 1992. The 16 <a href="#">Contracting Parties</a> are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and UK, together with the European Union.	
<b>Status of implementation</b>	Continues to be implemented.	
<b>What is the legislative status?</b>	The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22nd September 1992. The Convention entered into force on 25 March 1998. OSPAR provides a marine data and information management system.	
<b>Thematic and Spatial scope</b>	Thematically, OSPAR monitor levels of manmade contamination and manmade activity in the North East Atlantic. This includes levels of radioactive substances, contaminants in biota, sediment and water, biological parameters like mammal and bird numbers, litter ingested by sea turtles, pelagic and benthic habitats, the number of offshore installations, benthic fishing intensity, acidification, underwater noise. Spatially OSPAR covers the North East Atlantic. They have divided their Maritime Area into five regions: Region I – Arctic Waters; Region II – Greater North Sea; Region III – Celtic Seas; Region IV – Bay of Biscay and Iberian Coast; and Region V – Wider Atlantic	
<b>Does it consider raw data or interpreted information?</b>	Both raw and interpreted data are collated and disseminated.	
<b>Is data/ information managed centrally or distributed?</b>	Centralised. The OSPAR Data and Information System ( <a href="#">ODIMS</a> ) is an online tool providing a single point of access to all the data and information gathered through OSPAR’s Joint Assessment and Monitoring Programme (JAMP) across the different thematic work areas of the Convention. It will help ensure that data is readily accessible for OSPAR assessments but also help a broad range of users to find data held by OSPAR, to facilitate access to it and make use of it.	
<b>How is the management of the initiative structured?</b>	The OSPAR Secretariat administers the work under the Convention, coordinates the work of the Contracting Parties and runs the formal meeting schedule of OSPAR.	
<b>Who is involved or leads in the UK?</b>	Defra is the contracting party for the UK. Currently the representative is Andrew Scarsbrook. UK reporting and data flows are overseen by the Marine Assessment and Reporting Group (MARG) and carried out by four Evidence Groups. The OSPAR Secretariat is based in the UK, at offices in central London. <a href="https://www.ospar.org/organisation/staff">https://www.ospar.org/organisation/staff</a>	
<b>How does it link to the other initiatives?</b>	<ul style="list-style-type: none"> <li>The OSPAR Commission and ICES have a <a href="#">Memorandum of Understanding (MoU)</a> that outlines their cooperation. ICES hosts and</li> </ul>	

	<p>quality controls data collected by the OSPAR Coordinated Environmental Monitoring Programmes (CEMP). The CEMP collects data on contaminants in the North-East Atlantic from water, sediment, and biota. The UK submit data to CEMP by submitting to ICES first using the MERMAN+ tool.</p> <ul style="list-style-type: none"> <li>• OSPAR objectives and outputs such as assessments and monitoring programmes are linked to many other initiatives. For example, the North East Atlantic Environment Strategy. The UK Marine Strategy, a three-part framework for achieving "clean, healthy, safe, productive and biologically diverse oceans and seas," aligns with the OSPAR Convention's goals for the North-East Atlantic, using OSPAR's common indicators and coordinating actions within OSPAR regions.</li> <li>• Data linked to OSPAR activities are made available via the EMODnet Human Activities portal.</li> <li>• OSPAR is an Associate Data Unit within the IOC/IODE system.</li> </ul>
<b>What is MEDIN's input to these initiatives</b>	MEDIN has no direct interaction with OSPAR but provides data management advice to MARG and its four Evidence Groups.
<b>What does this mean for UK policy?</b>	UK policy assessments and reporting have been aligned to match those required for OSPAR wherever possible.
<b>Links and suggested contact point</b>	<p><a href="https://www.ospar.org/">https://www.ospar.org/</a>  The secretariat can be contacted at: <a href="mailto:secretariat@ospar.org">secretariat@ospar.org</a>  Andrew Scarsbrook leads for the UK <a href="mailto:andrew.scarsbrook@defra.gov.uk">andrew.scarsbrook@defra.gov.uk</a></p>


4 Organisation for Economic Cooperation and Development (OECD)	
<b>What are the aims of the initiative?</b>	<p>The <a href="#">OECD</a> aims to stimulate economic progress and world trade through collaboration among its 38 member countries. The OECD promotes better policies for better lives, working with public and private partners globally to improve sustainable development outcomes and encourage effective development cooperation and financing.</p> 
<b>Who is driving the initiative?</b>	The Council is the OECD's decision-making body. Composed of one representative from each Member Country as well as from the European Union. It is chaired by the Secretary-General.
<b>Status of implementation</b>	The OECD has been established since 1961
<b>What is the legislative status?</b>	Convention on the Organisation for Economic Co-operation and Development was ratified in 1961
<b>Thematic and Spatial scope</b>	Global and regional initiatives aim to establish evidence-based international standards and find solutions to a range of social, economic and environmental challenges.
<b>Does it consider raw data or interpreted information?</b>	Both raw and interpreted data. OECD is most known for reporting world social and economic statistics. However, they also instigated the creation of <a href="#">GBIF</a> (Global Biodiversity Information Facility) which holds both raw and interpreted biodiversity data (including marine data).
<b>Is data/ information managed centrally or distributed?</b>	In GBIF, data are managed centrally.

<b>How is the management of the initiative structured?</b>	The Council oversees strategic direction. Over 300 Substantive Committees propose solutions, develop standards, assess data and policy successes, and review policy actions. The Secretariat in Paris carries out the work.
<b>Who is involved or leads in the UK?</b>	Ambassador Andrew Wood took up duties as the Permanent Representative of the United Kingdom to the OECD in Paris in September 2025.
<b>How does it link to the other initiatives?</b>	In 1999, the OECD's Megascience Forum Biodiversity Informatics Subgroup recommended the creation of the Global Biodiversity Information Facility (GBIF). GBIF was formally established in September 2001 as a voluntary collaboration between governments, with the aim of providing anyone, anywhere with free and open access to data about all types of life on Earth. It works through a network of national and organizational nodes, with more than 1,600 institutions worldwide, mobilizing data via the global platform GBIF.org operated by a secretariat based in Copenhagen, Denmark. GBIF and <a href="#">OBIS</a> (Ocean Biodiversity Information System) collaborate in many areas, such as working with the same data standards and supporting tools like the <a href="#">Integrated Publishing Toolkit</a> , developed by the GBIF community and used by OBIS as the recommended platform for sharing marine data.
<b>What is MEDIN's input to these initiatives</b>	DASSH, the MEDIN Data Archive Centre (DAC) for species and habitats, is the UK Node of OBIS and publishes data directly to GBIF via the Integrated Publishing Toolkit. DASSH also works with the UK <a href="#">National Biodiversity Network (NBN)</a> to publish a comprehensive view of UK data to GBIF.  MEDIN collaborated with OECD and Global Ocean Observing System (GOOS) on Jolly, C., et al. (2021), "Value chains in public marine data: A UK case study", <i>OECD Science, Technology and Industry Working Papers</i> , No. 2021/11, OECD Publishing, Paris, <a href="https://doi.org/10.1787/d8bbdcfa-en">https://doi.org/10.1787/d8bbdcfa-en</a> .
<b>What does this mean for UK policy?</b>	UK government has been actively involved in OECD initiatives, particularly in regulatory policy and international cooperation.
<b>Links and suggested contact point</b>	<a href="https://www.gbif.org">https://www.gbif.org</a> <a href="mailto:info@gbif.org">info@gbif.org</a> Contacts can be found <a href="#">here</a> .


<b>5 International Hydrographic Organisation (IHO)</b>	
<b>What are the aims of the initiative?</b>	<p>The International Hydrographic Organization is an intergovernmental organization that works to ensure all the world's seas, oceans and navigable waters are surveyed and charted, thereby supporting safety of navigation and the protection of the marine environment. It coordinates the activities of national hydrographic offices and sets standards in order to promote uniformity in nautical charts and documents. It issues survey best practices and provides guidelines to maximize the use of hydrographic information.</p> <p>In <a href="#">July 2002</a>, the revised Chapter V of the IMO Safety of Life at Sea (SOLAS) Convention entered into force. Under the new Regulation 9, the Contracting Governments of SOLAS are now required to provide and maintain Hydrographic Services and products.</p>
<b>Who is driving the initiative?</b>	The Secretary General and Directors, together with international experts in hydrography and nautical cartography make up the IHO Secretariat in Monaco. The Secretariat coordinates and promotes the IHO's work programmes and provides advice and assistance to Member States and relevant third parties. As of May 2024, the IHO comprised 100 Member States.
<b>Status of implementation</b>	IHO was founded in 1921 as the International Hydrographic Bureau (IHB); it has been operational since then.



<b>What is the legislative status?</b>	Convention on the International Hydrographic Organization signed in 1967.
<b>Thematic and Spatial scope</b>	The IHO remit is hydrographic data and information on a global basis.
<b>Does it consider raw data or interpreted information?</b>	Raw data, information and capacity building.
<b>Is data/ information managed centrally or distributed?</b>	Distributed among Member States. There are Regional Electronic Navigational Chart Coordinating Centres (RENCs) that helps Hydrographic Offices (HOs) with the production, distribution, and quality assurance of Electronic Navigational Charts (ENCs). RENCs are established by IHO member states to ensure a consistent level of high quality data and coordinated services for ENCs and their updates. The International Centre for Electronic Navigational Charts (IC-ENC) UK is the Regional ENC Coordinating Centre (RENC) headquarters in Taunton, UK. IC-ENC is the world's largest RENC, representing more than half of the world's Hydrographic Offices.
<b>How is the management of the initiative structured?</b>	After revisions to the Convention on the IHO were made in 2016, the secretariat is now headed by a Secretary-General and two supporting Directors. All three members of the secretariat are elected to their positions by the Member States at the regular Assembly of the IHO. The bulk of the IHO's technical and specialist expertise comes from Member States' personnel, often assisted by invited industry experts, who all provide technical contributions through participation in various IHO committees and working groups.
<b>Who is involved or leads in the UK?</b>	UKHO represents the UK on IHO.
<b>How does it link to the other initiatives?</b>	IHO collaborates with IOC on the General Bathymetric Chart of the Ocean (GEBCO). The Nippon Foundation-GEBCO Seabed 2030 Project (Seabed 2030) is a global initiative to accelerate ocean mapping efforts of which IHO is a partner. Seabed 2030. The IHO Data Center for Digital Bathymetry (DCDB) is the central repository for raw bathymetric data and all data compiled by Seabed 2030 and is hosted by the US National Oceanic and Atmospheric Administration (NOAA) in Boulder, Colorado. The DCDB archives and freely shares depth data acquired by vessels during surveys or while on passage. Seabed 2030 is a flagship programme of the United Nation's Ocean Decade of Ocean Science for Sustainable Development (2021-2030).
<b>What is MEDIN's input to these initiatives</b>	UKHO, the MEDIN DAC for bathymetry data, has membership of IHO.
<b>What does this mean for UK policy?</b>	Ensuring adherence to the hydrographic standards developed and endorsed by the IHO.
<b>Links and suggested contact point</b>	<a href="http://www.iho.int">http://www.iho.int</a> James Carey <a href="mailto:james.carey@ukho.gov.uk">james.carey@ukho.gov.uk</a> (UKHO representative on the MEDIN Sponsors Board)

<b>6 World Meteorological Organisation (WMO)</b>	
<b>What are the aims of the initiative?</b>	The WMO provides world leadership and expertise in international cooperation in the delivery and use of high-quality, authoritative weather, climate, hydrological and related environmental services by its Members, for the improvement of the well-being of societies of all nations. 
<b>Who is driving the initiative?</b>	The WMO is governed by the World Meteorological Congress, which is composed of all WMO Members. As of August 2023, the WMO has a membership of 193 member states.
<b>Status of implementation</b>	WMO originates from the International Meteorological Organization (IMO), which dates back to 1873. The WMO mandate, constituent bodies and

	procedures are set out in the WMO Convention, which entered into force on 23 March 1950 – a year later WMO became a specialized agency of the United Nations.
<b>What is the legislative status?</b>	WMO Convention 1950
<b>Thematic and Spatial scope</b>	WMO coordinates the activities of National Meteorological and Hydrological Services in 193 States and Territories so that basic weather, climate and water services are made available to anyone who needs them, when they need them.
<b>Does it consider raw data or interpreted information?</b>	Both
<b>Is data/ information managed centrally or distributed?</b>	Through WMO coordination, worldwide access to a wide variety of real-time and non-real-time data and information was established in 1950 and has since undergone continuous improvement in scope, reliability and accuracy. These weather, climate and water services contribute towards socio-economic development, environmental management and policy formulation. The WMO Information System 2.0 (WIS 2.0) is the framework for WMO data sharing for all WMO domains and disciplines. It supports the WMO Unified Data Policy (published April 2022) and makes international, regional, and national data sharing simple, effective, and inexpensive. This new data-sharing infrastructure will gradually replace the existing Global Telecommunication System (GTS).
<b>How is the management of the initiative structured?</b>	WMO acts as a central framework where Members, including representatives of National Meteorological and Hydrology Services (NMHSs), can effectively discuss all issues related to weather, climate and water. The goal of WMO is to ensure that these streams of information flow as rapidly and efficiently as possible and contribute to the safety and well-being of all peoples. The World Meteorological Congress is the highest decision-making body. The Executive Council implements decisions adopted by the Congress. Six regional associations are responsible for the coordination of meteorological, hydrological and related activities within their respective Regions. Technical commissions, made up of technical experts, make recommendations to Congress and the Executive Council.
<b>Who is involved or leads in the UK?</b>	The Met Office leads the UK's engagement with the WMO, sharing information and data with other member countries. The UK Centre for Ecology and Hydrology provides the UK Hydrological Adviser for the WMO, supporting the Met Office in coordinating UK engagement with National Meteorological and Hydrological Services around the world.
<b>How does it link to the other initiatives?</b>	The WMO collaborates with IOC, the International Science Council (ISC) and the UN Environment Programme (UNEP). Projects include the Global Ocean Observing System (GOOS), Global Climate Observing System (GCOS) and World Climate Research Programme (WCRP). The Joint WMO-IOC Collaborative Board is a guidance body, established to promote high-level collaboration and broad engagement of the relevant bodies of IOC and WMO. WMO is an observer to many IOC programmes, including the tsunami warning and mitigation system. The IOC IODE programme cooperates with the WMO Information System (WIS).
<b>What is MEDIN's input to these initiatives</b>	The UK Met Office, the MEDIN DAC for metocean data, leads UK engagement with WMO.
<b>What does this mean for UK policy?</b>	UK metocean data collection and management are aligned to WMO guidelines
<b>Links and suggested contact point</b>	<a href="https://wmo.int">https://wmo.int</a>  Fiona Carse <a href="mailto:fiona.carse@metoffice.gov.uk">fiona.carse@metoffice.gov.uk</a> (UK Met Office representative on the MEDIN Sponsors Board)

7 Global Ocean Observing System (GOOS)	
<b>What are the aims of the initiative?</b>	<p>The Global Ocean Observing System (GOOS) provides countries and end-users with critical information on physical, chemical, and biological essential ocean variables, aimed at delivery for climate, operational services, and ocean health. The GOOS mission is to lead the ocean observing community and create the partnerships to grow an integrated, responsive and sustained observing system.</p> 
<b>Who is driving the initiative?</b>	GOOS is an Intergovernmental Oceanographic Commission (IOC)-led programme leading and supporting a community of international, regional and national ocean observing programmes, governments, UN agencies, research organizations and individual scientists, providing essential data for science, policy, and society.
<b>Status of implementation</b>	GOOS was created in March 1991 by the <a href="#">Intergovernmental Oceanographic Commission (IOC)</a> of UNESCO in response to calls from the Second World Climate Conference in Geneva, 1990.
<b>What is the legislative status?</b>	GOOS is now sponsored jointly by the IOC, the <a href="#">World Meteorological Organization (WMO)</a> , the <a href="#">UN Environment Programme (UNEP)</a> and the <a href="#">International Science Council (ISC)</a> .
<b>Thematic and Spatial scope</b>	A global network of ships, buoys (fixed and drifting), subsurface floats, tide gauges, gliders and satellites that collect real time data. Parameters collected are identified as <a href="#">Essential Ocean Variables (EOVs)</a> and include physical (e.g., temperature, salinity, currents, ice), biogeochemical (e.g., dissolved gases and nutrients, acidification, particulate matter and tracers) and biological (e.g., phytoplankton) parameters.
<b>Does it consider raw data or interpreted information?</b>	Both raw data and interpreted information
<b>Is data/ information managed centrally or distributed?*</b>	<a href="#">OceanOps</a> is responsible for the coordination and monitoring of the GOOS observing systems, ensures centralisation, archiving and open access to metadata, assists in developing and tracking timely exchange of data and metadata and monitors the status and growth of the system. Real-time <i>in situ</i> data are inserted into the GTS and near-real-time and delayed-mode data are managed by a distributed network of specialised centres.
<b>How is the management of the initiative structured?</b>	The GOOS Steering Committee provides oversight and the Scientific and Technical Panels evaluate Essential Ocean Variable observation systems. The GOOS Management Team facilitates collaboration between various GOOS components and contributes to GOOS management and coordination. The Observations Coordination Group (OCG) works to guide and strengthen the implementation of GOOS and the WMO Integrated Global Observing System (WIGOS) through identifying, coordinating and developing relevant initiatives across the global ocean observing networks. GOOS is implemented by member states via their government agencies, navies and oceanographic research institutions working together in a wide range of thematic panels and regional alliances.
<b>Who is involved or leads in the UK?</b>	Jason Holt (NOC) is the UK <a href="#">National Focal Point for GOOS</a> . There are 13 regional alliances, of which the UK sits under EuroGOOS. The <a href="#">EuroGOOS UK Contacts</a> are Liz Bradshaw (NOC), Veronique Creach (Cefas) and Andrew Saulter (UK Met Office).
<b>How does it link to the other initiatives?</b>	The IOC and WMO are sponsors of GOOS.
<b>What is MEDIN's input to these initiatives</b>	<ul style="list-style-type: none"> <li>MEDIN collaborated with OECD and GOOS on Jolly, C., et al. (2021), "Value chains in public marine data: A UK case study", <i>OECD Science, Technology and Industry Working Papers</i>, No. 2021/11, OECD Publishing, Paris, <a href="https://doi.org/10.1787/d8bbdcfa-en">https://doi.org/10.1787/d8bbdcfa-en</a>.</li> </ul>

	<ul style="list-style-type: none"> <li>• BODC is (or has been) involved with data management for the following GOOS initiatives: Argo, OceanSites, GO-SHIP, GLOSS, MEOP and OceanGliders.</li> <li>• The Met Office and Cefas are involved in some GOOS projects, although Cefas involvement is not related to FishDAC activities.</li> </ul>
<p><b>What does this mean for UK policy?</b></p>	<p>GOOS Essential Ocean Variables (EOVs) are a prioritised set of physical, biogeochemical, and biological measurements identified by the to monitor the ocean's health, climate change, and support operational services. In the UK, these variables are crucial for informing marine policy, managing ecosystems, and ensuring safe maritime operations.</p>
<p><b>Links and suggested contact point</b></p>	<p><a href="https://goosocean.org">https://goosocean.org</a> <a href="#">UK contacts</a></p>