2021 2030 United Nations Decade of Ocean Science for Sustainable Development

PROPOSAL FOR THE ESTABLISHMENT OF AN OCEAN DECADE COORDINATION OFFICE

To be submitted electronically to the Decade Coordination Unit (DCU), including attachments as relevant. Please send to j.barbiere@unesco.org with a copy to a.clausen@unesco.org

1. PROPONENT INSTITUTION DATA	
Lead Institution name: Global Ocean Observing System, (GOOS)	**Focal point(s) contact name(s):** Albert Fischer Emma Heslop
Lead Institution Type: GOOS is an Intergovernmental Oceanographic Commission (IOC)-led programme. The IOC is part of UNESCO.	**Focal point(s) contact email(s):** a.fischer@unesco.org e.heslop@unesco.org
Country and City: Paris, France	**Focal point(s) phone number(s):** +33145680530 +33145681977

Address:	**Legal representative name (if different from above):**
7 place de Fontenoy 75352 Paris 07-SP France	Vladimir Ryabinin (Executive Secretary IOC)
Webpage and social media: Global Ocean Observing System - Home (goosocean.org) goos@unesco.org	**Legal representative email (if different from above):** v.ryabinin@unesco.org

Institution background: *(Please describe the vision / mission of the institution, describe the technical field in which the institution operates, the years of operation, and describe any parent institution if applicable).*

The Global Ocean Observing System (GOOS) is a permanent programme coordinating the functioning of a sustained ocean observing system serving societal needs for ocean information across climate, weather and hazard warnings, and ocean health.

GOOS was created in March 1991 by the Intergovernmental Oceanographic Commission (IOC) of UNESCO in response to calls from the Second World Climate Conference in Geneva, 1990. Since 1991 GOOS has created an extensive global system, based on contributions from many organisations and nations, from which nations, organisations and people all over the world benefit.

In its first decades GOOS coordinated the development of a global ocean observing system designed to support the needs of climate science and provide the ocean and marine meteorological backbone for weather and hazard warning systems. This success, coupled with growing concerns about the health of the oceans and information to support a sustainable blue economy saw the development of the *Framework for Ocean Observing* (2012), and then the *Global Ocean Observing System 2030 Strategy (*2019) with the vision of *'a truly integrated global ocean observing system that delivers the essential information needed for our sustainable development, safety, wellbeing and prosperity'.*

GOOS is led by the Intergovernmental Oceanographic Commission (IOC) of UNESCO, and co-sponsored by the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Science Council (ISC).

GOOS' mission is to lead the ocean observing community and create the partnerships to grow an integrated, responsive and sustained observing system that serves users as effectively as possible.

GOOS provides accurate descriptions of the present state of the oceans, including living resources, continuous forecasts of the future conditions of the sea for as far ahead as possible, and the basis for forecasts of climate change. GOOS is designed to deliver the ocean information to:

- Monitor, understand and predict weather and climate
- Describe and forecast the state of the ocean, including living resources
- Improve management of marine and coastal ecosystems and resources
- Mitigate damage from natural hazards and pollution
- Protect life and property on coasts and at sea
- Enable scientific research

GOOS supports a global community encompassing all those playing a role in the observing system: international, regional, and national observing programs, governments, UN agencies, research organizations, and individual scientists. By working together on observing tools and technology, the free flow of data, information systems, forecasts, and scientific analysis, this global community can leverage the value of all these investments.

Institution structure: (Please describe if the institution's activities are international, national, or regional, the operational structure – centralized or decentralized-, number of permanent and temporary personnel linked to the institution, budget mobilized and managed by the institution in the last 3 years and the sources of these funds, existing internal and external capacities for administrative support, and infrastructure)

GOOS is an Intergovernmental Oceanographic Commission (IOC)-led programme. The IOC is part of UNESCO. GOOS is co-sponsored by two UN organisations, WMO and UNEP, as well as by ISC. This increases the convening power of the DCO, creating a unifying "ecosystem" combining meteorological and oceanographic observations, as well as data management aspects. It also provides a direct pathway for these organisations to engage in the Ocean Decade.

The GOOS Office enables collaboration between different parts of the Core Team. Oversight is provided by a multinational Steering Committee.

The GOOS Steering Committee governs and coordinates the components of GOOS, steering its work to achieve objectives of the Global Ocean Observing System 2030 Strategy.

Three expert panels supply the GOOS Steering Committee with scientific advice and expertise that underpins GOOS's strategic goals.

- The Physics and Climate Panel focuses on physical processes, including interactions with the atmosphere and cryosphere - the frozen part of the earth's water system - circulation patterns, transport and storage of heat and momentum and influences on ecosystem functions that control the uptake of critically important gases. It is co-sponsored by GOOS, the Global Climate Observing System (GCOS), and the World Climate Research Programme (WCRP).

- The International Ocean Carbon Coordination Project (IOCCP) acts as the GOOS Biogeochemistry Panel. It coordinates a diverse set of activities intended to establish the qualitative and quantitative role of the marine carbon and biogeochemistry system and its numerous connections to carbon's atmospheric and terrestrial pathways. This underpins projections of future climate, and how habitats for ocean ecosystems will change.

- The Biology and Ecosystems Panel is made up of biology and ecosystem experts from around the world who provide guidance to the GOOS community. It aims to provide a better understanding of marine life to meet universal goals in sustainable development and conservation.

Within its discipline, each expert panel is responsible for identifying and setting requirements for Essential Ocean Variables (EOVs), developing sampling requirements and implementation strategies and guiding evaluations and assessment of the ocean observing system.

The Observations Coordination Group (OCG) strengthens implementation of the global ocean observing system by reviewing, advising on and helping to coordinate 12 global ocean observing networks. Together these networks respond to global, regional, and national requirements and deliver common data streams. Coordination brings efficiency and knowledge sharing, leading to solutions for the future. Under the OCG, OceanOPS provides support to the system through tracking and visualization, metadata, and operational efficiency.

The Expert Team on Operational Ocean Forecast Systems (ETOOFS) enables worldwide use of timely and reliable ocean forecasts for applications in national security, environmental protection and the maritime economy. It is a vital operational link between GOOS observing networks and weather and ocean services delivered through WMO and IOC.

GOOS unifies national observing systems to meet national needs, strengthen connections through learning and sharing, and make a greater set of ocean observations available to a global community. Eighty-four (84) nations actively contribute to the system. The GOOS Regional Alliances (GRAs) integrate these national needs into regional systems and deliver the benefits of GOOS's strategy, structure, and programmes at a regional, national and finally global level. GRAs are coalitions of nations and/or institutions that share GOOS principles and are connected to ocean priorities at regional scales. Different regions of the globe are represented through 15 GRAs, emphasizing regional priorities, and differing by need, resources, and culture. These interact with each other to learn and share best practice in implementing observing systems.

GOOS Projects advance innovation and expand into new areas and capabilities for the ocean observing system, current projects include AtlantOS, Deep Ocean Observing Strategy (DOOS), Ocean Best Practice System (OBPS, with IODE), TPOS2030 (Tropical Pacific Observing System 2030), and SMARTCables.

United Nations Status: *(Please describe the mandate given to the Institution by the UN governing body)*

GOOS is led by the Intergovernmental Oceanographic Commission (IOC) of UNESCO, and co-sponsored by the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Science Council (ISC).

Terms of reference are given by IOC Resolution XXVI-8 (2011).

We lead and support a community of international, regional, and national ocean observing programmes, governments, UN agencies, research organizations and individual scientists.

Ocean observing is fundamental to achieving the goals of the Decade of Ocean Science for Sustainable Development. We are proud to be a key part of this visionary initiative.

Additional Qualification Processes: *To help us establish if any additional qualification processes are required to be carried out, please reply Yes or No to the following questions)*

Does the mandate of your Institution already cover the set of responsibilities that will be required of a Decade Coordination Office?

☐ Yes

X No

If the answer to the above question is no, has a proposal for adjustment to your mandate been submitted to the governing UN body?

☐ Yes

X No

If the answer to the above question is Yes, what is the status of this proposal? If No, when will such a proposal be submitted?

This application will be submitted to the DCU for commentary and adjustments as may be needed. This application will then be vetted by the GOOS steering committee on April 25, 2022; either as is, or in the form of a Terms of Reference. The steering committee approved TOR will then be sent back to the DCU who will be requested to submit them to the IOC Executive committee meeting in June asking for an adjustment of the mandate of GOOS allowing it to stand up the proposed DCO.

Partners: *(Please list partners, if any, that will a part of the proposed Decade Coordination Office; including their institutional information, location, legal status, objectives, and capacities)*

Possibly IOC member states - particularly those that contribute to GOOS - may be willing to provide financial or in-kind (staff) assistance for the operation of the DCO. This would create a long-term sustainable resource basis to ensure the long-term operation of the DCO (but preferably in combination with hard cash and contractual staff).

We note that all members of the GOOS network should be considered as partners as they will contribute their expertise.

2. THEMATIC AND GEOGRAPHIC SCOPE OF THE DECADE COORDINATION OFFICE

Please mark the scope(s) that align with the proposed Office

Decade Coordination Offices will target defined scopes of work as established in the Operational Guidelines, while avoiding duplication of efforts. Thematic scopes will address a Decade Challenge (see Implementation Plan) globally. Geographic scopes will address all Decade Challenges for a specific Basin.

Proponents can mark (using a X) as many Thematic and Geographic scopes as considered relevant and appropriate to the proponent's capacity. If more than one option is marked, the Centre will be recommended to a Theme or Geographic area from the options marked based on the Decade's priorities, the proponent's capacities, and the availability of Themes and Geographic areas. In exceptional cases, a Centre can be assigned to more than one of these, or to both a Theme and a Geographic area.

Thematic			**Geographic**	
Challenge 1: Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems and develop solutions to remove or mitigate them.			**Southern Ocean**	
Challenge 2: Understand the effects of multiple stressors on ocean ecosystems, and develop solutions to monitor, protect, manage and restore ecosystems and their biodiversity under changing environmental, social and climate conditions.			**Arctic Ocean**	
Challenge 3: Generate knowledge, support innovation, and develop solutions to optimize the role of the ocean in sustainably feeding the world's population under changing environmental, social and climate conditions.			**Indian Ocean**	
Challenge 4: Generate knowledge, support innovation, and develop solutions for equitable and sustainable development of the ocean economy under changing environmental, social and climate conditions.			**North Atlantic Ocean**	
Challenge 5: Enhance understanding of the ocean-climate nexus and generate knowledge and solutions to mitigate, adapt and build resilience to the effects of climate change across all geographies and at all scales, and to improve services including predictions for the ocean, climate and weather.			**North Pacific Ocean**	
Challenge 6: Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience.			**South Atlantic Ocean**	

Challenge 7: Ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely, and actionable data and information to all users.	X		**South Pacific Ocean**	
Challenge 8: Through multi-stakeholder collaboration, develop a comprehensive digital representation of the ocean, including a dynamic ocean map, which provides free and open access for exploring, discovering, and visualizing past, current, and future ocean conditions in a manner relevant to diverse stakeholders.			**Other**	
Challenge 9: Ensure comprehensive capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science and for all stakeholders.				X
Challenge 10: Ensure that the multiple values and services of the ocean for human wellbeing, culture, and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.			All global bodies of water.	

Please explain your choices and provide additional information on the proposed scope of the Centre, including preferences, detailed geographical scope proposed, or other information as relevant.

Ocean Decade Challenge 7 specifically identifies the need to ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely and actionable data and information to all users. However, sustained and fit for purpose ocean observations will also be key to the fulfilment of most of the remaining challenges, including for example those related to the ocean climate nexus, ecosystem management, marine pollution and resilience.

A GOOS supported DCO to cover Challenge 7 fits well with GOOS 2030 Strategy to create *a truly integrated global ocean observing system that delivers the essential information needed for our sustainable development, safety, wellbeing and prosperity.*

The broad scope of the Ocean Decade is a major opportunity for the accelerated development of sustained observations, to identify and fill gaps in capacity, to connect the data and the use across silos, to answer the pull to deliver solutions for sustainable economic growth.

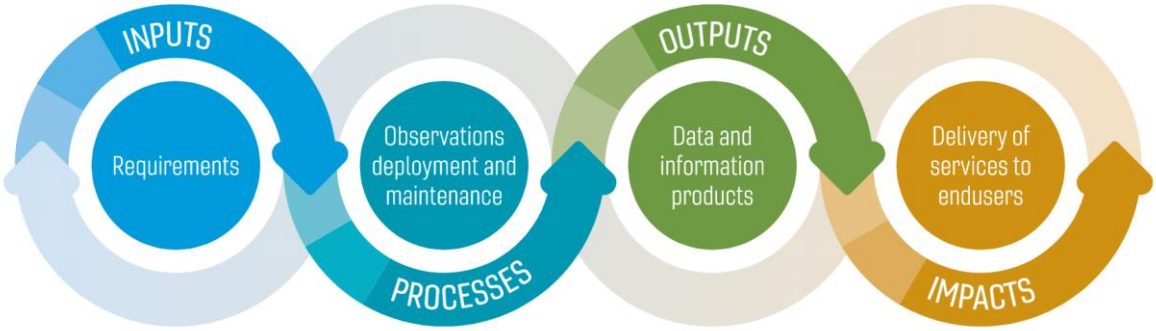
There needs to be engaged oversight of what we achieve through the Decade so that we do make a difference over the next 10 years and leave users with solutions, and an integrated and sustainable legacy.

3. PROPOSAL FOR HOSTING OF A COORDINATION OFFICE

Coordination Office profile: *(Please provide a summary description of the profile and activities proposed for the Coordination Office)* (250 words limit).

The core focus of the DCO will be on supporting Challenge 7: Ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely, and actionable data and information to all users.

The Figure below illustrates the ocean data flow from observations through to end-user use for decision making, and the impact this has on society. This highlights the importance of consistent and coordinated ocean observing activities to ensure the reliability of data products such as model forecasts and applications. It also highlights the importance of interactions between this DCO and other focus area DCOs. This DCO aims to be the hub for the ocean observing component of the digital ecosystem needed for the Ocean Decade - see also Annex 1 illustrating the Ocean Decade digital ecosystem concept.



The DCO will play a coordination and catalysis role for Decade Actions that are wholly or partly involved in observations. As a result, it will indirectly support GOOS and stakeholders to enhance the coverage, breadth, quality and utility of ocean observations, and hence the societal value of ocean observing. It will do this by:

(i) Identifying opportunities and supporting collaboration between Decade Actions.

(ii) Supporting broader connection across all observing communities represented within the Ocean Decade Actions (i.e. beyond GOOS).

(iii) Supporting links between Decade Actions and existing infrastructure, such as GOOS, IODE, WMO, UNEP, etc., aiming for longevity of observing advances made under the Ocean Decade.

(iv) Liaising with similar bodies focused on data (IODE DCO) and modelling (French/EU DCC) to support information flow and structural planning around the connections between these components of the information delivery system.

(v) Liaising across the Ocean Decade with the help of the DCU to identify gaps in ocean observing capacity and infrastructure from the perspective of the other Ocean Decade challenges.

(vi) Raising awareness of ocean observing, encouraging stakeholder engagement, and assisting with fundraising and sourcing of resources through communications activities.

(vii) Encouraging adherence to best practices and FAIR data principles within the Decade Actions.

(viii) Identifying and sharing lessons learned by the observing community related to Challenge 7.

(ix) Providing strategic advice to the Decade, to the Actions and to GOOS (and other observing infrastructure), in aligning actions with each other, in addressing gaps in existing infrastructure, and by informing future Calls for Actions.

(x) Encouraging the development of any technical and scientific capacities needed to support the Decade Actions.

(xi) Providing advice to the Decade Coordination Unit in reviewing requests for endorsement of Decade Actions that fall within its purview.

(xii) Organizing regular reporting by all DCCs, DIPs, programmes and projects within the scope of work of the DCO and in line with the requirements of the Monitoring and Evaluation Framework of the Ocean Decade

Governance

The DCO will deliver an annual workplan to the DCU and the GOOS Steering Committee, setting out the main priorities, tasks, goals, etc., for the year, to make sure there is alignment with the Ocean Decade goals and the other DCOs/DCCs.

The DCO will also communicate back to the DCU and DCG, any gaps or other issues identified from within its coordinating remit.

Note: further details on governance will be finalised following alignment discussions with the other DCOs/DCCs - details to be finalised before presentation to the IOC Executive Board.

Justification & alignment with proposed scope: *(Please describe the institutional motivation for participating in the Ocean Decade including the alignment with the institutional vision and mission, and how the proposed role as a Decade Coordination Office will contribute to the Decade vision and mission as outlined in the Decade Implementation Plan)* (500 words limit).

We refer to the responsibilities of a DCO:

"*Acts as sub-unit of the central Decade Coordination Unit. Catalysis and coordination of Decade Actions including of Calls for Decade Actions, organize and coordinate Decade review processes, promote cooperation amongst UN and Member State partners, communications, monitoring, and resource mobilization.*"

Ocean Observing in the Ocean Decade: There are now over 121 endorsed Ocean Decade Programmes and Projects, a significant number (56%) of which are directly contributing to meeting the Ocean Decade Challenge 7 related to observations. Many of these actions have roots in GOOS, including the Observing Air-Sea Interactions Strategy (OASIS), Ocean Practices for the Decade, Marine Life 2030, the Ocean Biomolecular Observing Network (OBON), OneArgo, GO-SHIP

Evolve, AniBOS, and Odyssey. However, some are not related to GOOS and represent new entrants that should be connected to sustained infrastructure or observing that takes places beyond GOOS scope, for example monitoring for fishing and pollution.

GOOS is also leading three transformative Ocean Decade Programmes that address major gaps in the system and will deliver priority elements of the GOOS 2030 Strategy; Ocean Observing Co-Design, CoastPredict and Observing Together, which together focus on capacity development, revolutionizing observing and forecasting into the coast, and at the same time evolving system design to be increasingly user and application driven, with tools to evaluate ROI.

GOOS already has working relationships with other UN agencies, non-UN regional, international organizations and private sector (either directly or indirectly through projects or other IOC programmes in which GOOS is a partner).

Given its central role in global observations and the Ocean Decade, GOOS will play a strong coordination role throughout the Ocean Decade. This coordination role will be essential to the success of the Ocean Decade.

The quantity of Decade Actions involved, the need to ensure connection across the Ocean Decade, the need to ensure actions are built for the future, and that the coordination goes beyond GOOS' existing scope, requires additional support. In return there is a clear opportunity for the DCO to lift ocean observing capacity, help the Ocean Decade reach its aims, and lead to transformation of GOOS within the Ocean Decade and to meet the challenges beyond 2030.

Expertise and Experience: *(Please describe the expertise and experience of the host organization in coordinating ocean science programmes or activities at the regional or global level. Please include a description of how the potential gaps will be complemented by any partner(s)).* Please, upload any relevant supporting documents (500 words limit).

The Global Ocean Observing System (GOOS) coordinates sustained ocean observing activities across the global ocean, to support the delivery of information to those taking decisions across climate adaptation and policy, regarding hazard warnings and weather, for marine resource management, and for marine transport and operations.

GOOS has three key delivery areas: climate, forecasts and warnings, and ocean health. It is led by the Intergovernmental Oceanographic Commission (IOC) of UNESCO and co-sponsored by World Meteorological Organisation (WMO), the United Nations Environment Programme (UNEP) and the International Science Council (ISC).

The GOOS community encompasses local, national and regional ocean observing systems and programmes, principal investigators, scientists and technicians undertaking sustained observations within national programs and global ocean observing networks, and the many individuals contributing to the work of GOOS. Through the work of its core components[1] GOOS leads the community in creating the frameworks and partnerships required to meet the needs of the diverse array of end users, across climate, weather and hazard forecasts, and ocean health.

The GOOS Observations Coordination Group (OCG) strengthens implementation of 12 global ocean observing networks. Together these networks deliver common data streams from a range of the different ocean and above ocean observing platforms. Eighty-six countries support these 12 global ocean observing networks, with some 8,900 in situ observing platforms in operation monitoring a broad range of Essential Ocean Variables (EOVs). The OCG works across the global networks to support integrated system design, efficiency, and the timely delivery of high-quality ocean data; best practices, technological innovation, and the evolution of networks to meet future requirements are important parts of this work.

The GOOS BioEco Panel supports the development of observing networks in the biological realm, it coordinates 13 BioEco networks, such as microbes, phytoplankton, fish, marine mammals, macroalgae and seagrass.

A technical coordination team at OceanOPS and IODE's Ocean Biodiversity Information System (OBIS) supports the implementation of GOOS through the integration and harmonization of metadata – basic information about data that makes it easier to find and use. This metadata management allows for accurate monitoring of ongoing global ocean observing activity across the 12 OCG networks and helps to ensure that data and metadata can be delivered to stakeholders.

Fifteen GOOS Regional Alliances (GRAs), support and coordinate implementation at a regional level with the mandate to connect "Global to Regional to National level". GRAs coordinate across national systems to solve regional priorities, differing by need, resources and culture. These interact with each other to learn and share best practice in implementing observing systems.

The Expert Team on Operational Ocean Forecasting (ETOOFS) creates guidance to improve the global quality, interoperability and capacity for ocean forecast products.

Expected operational start date	Mid to late 2022, dependent upon the availability of resources	**Initial timeframe commitment (years)**	4-5 years (with possible renewal after review)
		Please note that long-term proposals will be prioritized (4-5 years)	
Expected duration of the Office *(Please describe any periodical revision of funding expected and other considerations that may be relevant for defining the duration of the Centre)*		4-5 years (with possible renewal after review and depending on available resources)	

PARTNER ENTITIES *(Please fill this section if the proposal is being submitted by a group of partners)*
Justification and experience: *(Please justify the value added by the proposed partners for the proposal, and the relevant experience that they offer)* ***n/a***
Organizational structure: *(Please indicate the expected roles for each partner, and if any of the partners will take responsibilities over the activities of the Coordination Office)* n/a

4. RESOURCES FOR THE PROPOSAL *Please provide a detailed budget proposal as per the worksheet template which can be downloaded here: https://drive.google.com/file/d/102zBjaleY1NYbvvZB8o8_pCLhT8u-ySU/view?usp=sharing*	Budget *USD (Yearly average)*
Estimated total budget for the proposed Coordination Office. *(In addition to the information provided in the worksheet template, please, provide below an overview of the financial and in-kind resources that have been secured or are expected for the timeframe proposed initially, including a description of the sources for these. Please differentiate in-kind and financial resources, as well as resources executed by the lead entity from those executed by partners)* "Small team of dedicated staff, premises and office operational costs", with in-kind contributions from partner organizations and initiatives. A table of required resources provided in Annex 2. Implementation of the tasks assigned to the DCO will require 2 professional staff (1xP-4 and 1xP-3) as well as 1 administrative support staff. In summary: • The staff cost will be approx. US$ 445,000/year • Operational expenses will amount to approx. US$ 225,000/year There will be cost reducing benefits through the hosting of the DCO by the GOOS programme office in Paris, France as this facility benefits from being co-located with both the GOOS and the IOC headquarters. The DCO will have access to GOOS expertise, network, support and guidance, and will also benefit from close proximity to the Ocean Decade DCU in terms of coordination. This is further explained and detailed below. These are the minimum requirements to cover the 12 core activities related to direct actions under the DCO's remit as contained in Section 3 of the document, "Decade Collaborative Centres and Decade Implementation Partners".	
Human resources: *(In addition to the information provided in the worksheet template, please, describe the existing or proposed human resources that will be made available for the Decade Coordination Office and the estimated budget. Please provide information on existing versus new staff, their type of contract and time allocation, their roles, and their expected physical work location. Please differentiate in-kind and financial resources and indicate any resources executed by the lead entity from those executed by partners). Please, upload any relevant supporting documents (i.e., CVs of key staff if already identified, organizational chart).* As the DCO will be hosted in the GOOS and IOC headquarters in Paris, France it will be able to make use of a small portion of the staff time available at this office. This will be only on an as-needed basis and will not replace the staff listed in the resources table. Reference is made to Annex 3 for job descriptions of the three proposed positions.	

Other resources: (*In addition to the information provided in the worksheet template, please, describe the physical infrastructure that will be made available for the CC –buildings and their location, equipment, vehicles, communications, etc.- and the estimated budget. Please differentiate in-kind and financial resources, as well as resources executed by the lead entity from those executed by partners)* Please, upload any relevant supporting documents. As the DCO will be hosted in the GOOS and IOC headquarters in Paris, France office space will be made available for the three additional staff members assigned to the DCO from additional funds as detailed in the resource table.	

5. DESCRIPTION OF THE APPROACH AND PROPOSED ACTIVITIES OF THE COORDINATION OFFICE

Please refer to the Operational Guidelines for the Establishment of Decade Collaborative Centres and Implementing Partners and any other documentation be provided by UNESCO, such as the Resource Mobilization Framework and Monitoring & Evaluation Framework.

Note: A Decade Collaborative Centre and a Decade Coordination Office have essentially the same status and mandate with the Decade structure.

Stakeholder Coordination, Facilitation and Engagement: *(Please describe the approach and main activities proposed to be carried out in relation to stakeholder coordination, facilitation and engagement. Please describe the experience and capacities that already exist within the institution and partners)* (500 words limit)

- Organization of (online) meetings for stakeholder communities (grouped or joint and in close cooperation with GOOS) to discuss the targets of challenge 7 of the Decade IP, required infrastructure and methodologies, possible contributions from stakeholder communities, benefits to stakeholder communities.
- Engage and coordinate with GOOS and other sustained observing coordination entities across the projects associated with Challenge 7.
- Organization of (online) meetings with leaders of related, relevant Decade DCCs, DIPs (Decade Implementing Partners), and DCOs, Programmes and Projects to ensure coherent actions and complementarity and facilitate this through the community of practice on the global stakeholder forum.
- As may be deemed necessary, establishment of technical or strategic sub-groups to co-design required actions in response to Calls for Decade Actions with attention to end user engagement and end user needs.
- Facilitate Decade actions (e.g. through the IODE/GOOS OBPS) in support of best practices for observational activities, including but not limited to the use of standardized metadata and nomenclature in support of FAIR data.
- Promote cooperation with relevant GOOS components, Programmes, related Projects, other relevant UN entities and stakeholder groups to advance the implementation of the Decade.
- Raise awareness and visibility of the Decade and the need for Ocean Observations amongst diverse stakeholder groups and coordinate targeted communications activities in line with branding and messaging guidelines provided by the Decade Coordination Unit.
- Seek partnerships, voluntary commitments, sponsorship and funding to strengthen the implementation and impact of a truly integrated global ocean observing system that delivers the essential information needed to meet the challenges identified and in support of the Decade.
- Support capacity development under the remit of the DCO (ocean observations) which can be provided through or linked to existing activities such as the Observing Together Programme.

Calls for Action: *(Please describe the approach and main activities to support the Decade Coordination Unit to develop, launch and review Calls for Decade Actions that fall within the Centre's scope of work. Please describe the experience and capacities that already exist within the institution and partners in carrying out similar processes e.g. launching and management of requests for proposals)* (500 words limit):

- Based upon requirements identified during stakeholder meetings, draft calls for action to contribute to the expected outcomes (facilitate discussions in CoPs on gaps and needs in the global ocean observing system to inform the scoping of future calls for decade actions in close cooperation with the DCG)
- Discuss and coordinate draft calls with DCU (as well as with DCCs and ongoing programmes, projects to ensure complementarity). CFDAs will be launched by DCU – role of DCO is to provide input to scoping and provide input to review process for programmes to inform endorsement decisions
- The GOOS Office, GOOS Steering Committee and active GOOS projects regularly publish and review calls for proposals for consultants and sub-contractors, so mechanisms are in place.

Monitoring and reporting: *(Please describe the approach and main activities that are proposed in relation to monitoring and reporting on Decade Actions that fall within the Centre's scope of work, including the experience and capacities that exist within the institution and partners. Note that monitoring and reporting responsibilities of DCCs will be detailed in the Ocean Decade Monitoring and Evaluation Framework which is in preparation)* (500 words limit):

- Organize regular reporting by all DCCs, DIPs, programmes and projects within the scope of work of the DCO and in line with the requirements of the Monitoring and Evaluation Framework of the Ocean Decade
- As may be deemed necessary, organize reviews of the mentioned reporting by relevant experts based on the Ocean Decade Expert roster (using e.g. IOC/IODE OceanExpert for its management)
- Share the reports within the GOOS community on a rolling basis to improve the reporting quality and extend the pool of experts

Communications: *(Please describe the approach and main activities related to communications and engagement with stakeholders that fall within the Centre's scope of work to the general public, including the experience and capacities that already exist within the institution and partners)* (500 words limit):

- Organize regular communication of all activities undertaken by DCCs, programmes and projects under the scope of work of the DCO, through appropriate communication and public awareness channels
- Ensure communication channels between the GOOS DCO and other DCOs (and DCU) to ensure overall coordination of communication on data and information across all IP chapters.

Mobilisation of Resources: *(Please provide an overview of the approach and activities proposed to mobilise resources for supporting Decade Actions that fall within the Centre's scope of work, including the experience and capacities that already exist within the institution and partners)* (500 words limit):

- In close coordination with the DCU, DCCs, programmes and projects under the scope of the DCO, and supported by relevant communication efforts, support resource mobilization efforts to fund endorsed Decade projects and programmes through financial or in-kind contributions by member states, other organizations, private sector and foundations
- Coordinate Resource Needs Assessments of endorsed programmes and projects under the responsibility of the DCO in line with guidance provided by the DCU

Coordination of Decade Actions: *(Please provide an overview of the proposed approach and activities for coordinating Decade Actions that fall within the Centre's scope of work, including the experience and capacities that already exist within the institution and partners).* (500 words limit):

- See above actions

Other functions or responsibilities: *(Please describe any additional responsibilities or functions that the Decade Coordination Office proposes to fulfil).* (500 words limit):

- FAIR

Please provide any complementary information that you may consider relevant (500 words limit):

- n/a

Annexes and supporting documentation. *Please attach all relevant supporting information. It is especially relevant to include a support letter from the IOC National Focal Point, legal information on the institution(s) involved, their statutes and objectives, institutional and individual experience, and operational procedures already in place. Further information may be requested by the Decade Coordination Unit and/or Advisory Board. If the proposal is selected, additional information could be requested during the Feasibility Study, and for the preparation and signature of the Collaboration Agreement.*

Documents Attached:

Annex 1:	Ocean Decade digital system concept
Annex 2:	DCO Observations - Costing spreadsheet
Annex 3:	DCO Observations - Job Descriptions

ANNEX 1

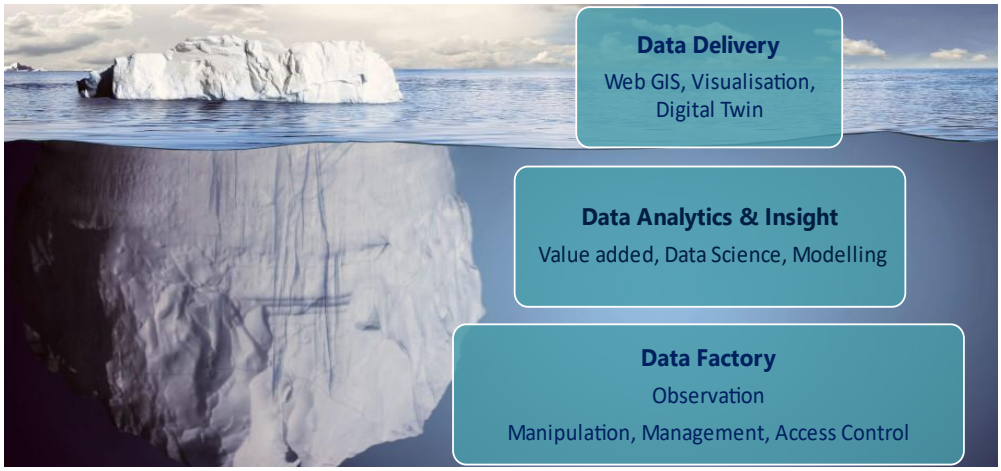
Ocean Decade Digital Ecosystem Concept

IOC-Decade Coordination Unit (March 2022)

Part 1: Data and Digital Ecosystems

Data and information are key enablers of the Ocean Decade outcomes. Digitizing, accessing, managing, and most importantly, using ocean related data, information and knowledge will be cornerstones of the success of the Ocean Decade. No single data, information and knowledge management infrastructure system will be able to support the Ocean Decade ambitions.

Foundational components of the 'Digital Ecosystem' that are integral to all science projects



Represented in the traditional form of a data pyramid, the three key components of any 'Digital Ecosystem' build on each other, each reliant on the step before. Put another way, an Ocean science or social project is not just what is visible and tangible – the web portal and the derived knowledge; it is everything that is perceptively 'under the surface' as well.

The Data Factory:

The Data Factory is the core data management engine needed to handle the complex and varied streams of data required to generate the intelligence needed to understand the ocean environment. A fully functional digital ecosystem covers the life journey of the Data; from sensor to Client. As such the first parts of this path, the logistics of tracking and tagging Data as it moves from the sensor to the Data Factory, and the management and manipulation of the Data with the Data Factory, are as important as the last part, the portal used to engage with the client.

Data Analytics & Insight

Efficiently condensing large volumes of data into much smaller packets of relevant information and knowledge is key to the success of any Ocean science or social project. This process can be as simple as trend analysis or as complex as the use of machine learning and artificial intelligence processes. Individual researchers and institutions have developed unique libraries of data science models that apply specifically to their own projects, but could be of value to many others.

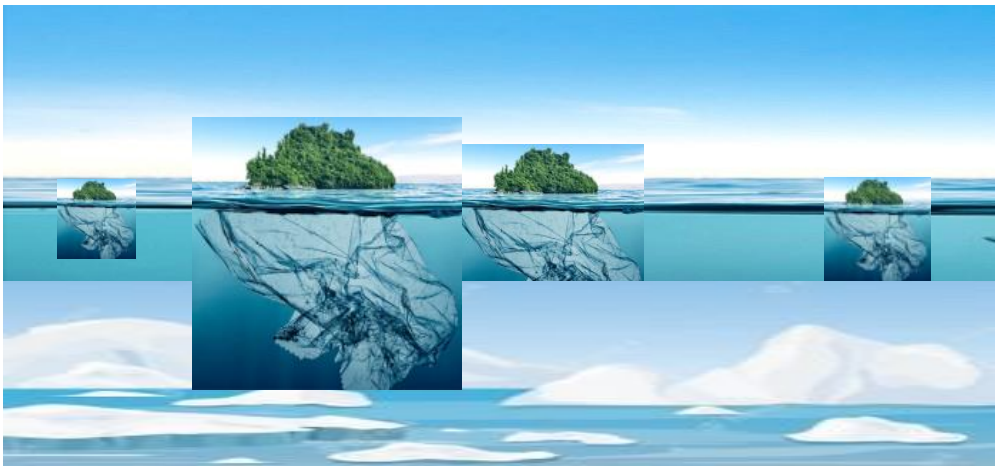
Data, Information & Knowledge Delivery

The delivery of Data to clients in a way that fits their requirements and current information management systems is critical to the distribution of Ocean information and knowledge. The concept of a Digital Twin is a specific type of delivery system. One that provides an interactive and dynamic interface between the end user and data from multiple sources.

This is the "shiny" part of the Digital Ecosystem, the visible part to which specific value and a return on investment can be assigned.

However, this tip of the iceberg is of no value if not fully supported by the underlying, less visible, less "shiny" parts of the Digital Ecosystem.

The Ocean Decade will have many such digital ecosystems



The Ocean Decade will have many such digital ecosystems, each with its own key requirements and deliverables, each with its own structure and functionalities. There will be, literally and figuratively, a vast ocean of such digital icebergs.

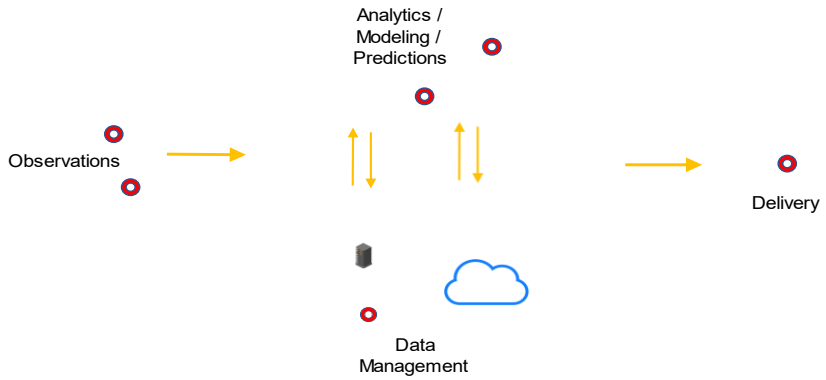
These can be left to float independently, or we can find ways pull them together into a collective based on common themes and best practices.

The intent of the Decade is to create an interoperable, federated community of such digital ecosystems, such that an end user can gain access to, and benefit from, all of them via a single-entry point.

Part 2: Managing Data within the UN Ocean Decade

There are today a myriad of ocean science and social projects underway in all parts of the world, on numerous different themes. As we have just seen, each project will be enabled by some sort of interconnected data ecosystem, spanning the journey of the data from the sensor through to its delivery as information to an end user.

The Data Journey



Looking at a typical ocean science project from a data-flow perspective there are four (4) primary functional activity areas (see diagram above):

- Observations,
- Data Management,
- Analytics & Modelling (value extraction), and
- Applications (the knowledge and information delivery systems)

As with any digital ecosystem there are APIs (application programing interfaces) that connect the key activities, facilitating the flow of data or information.

The Ocean Decade is therefore not the start of something new, it is the continuation of something old; a decentralized, disconnected set of projects, infrastructure and functionalities.

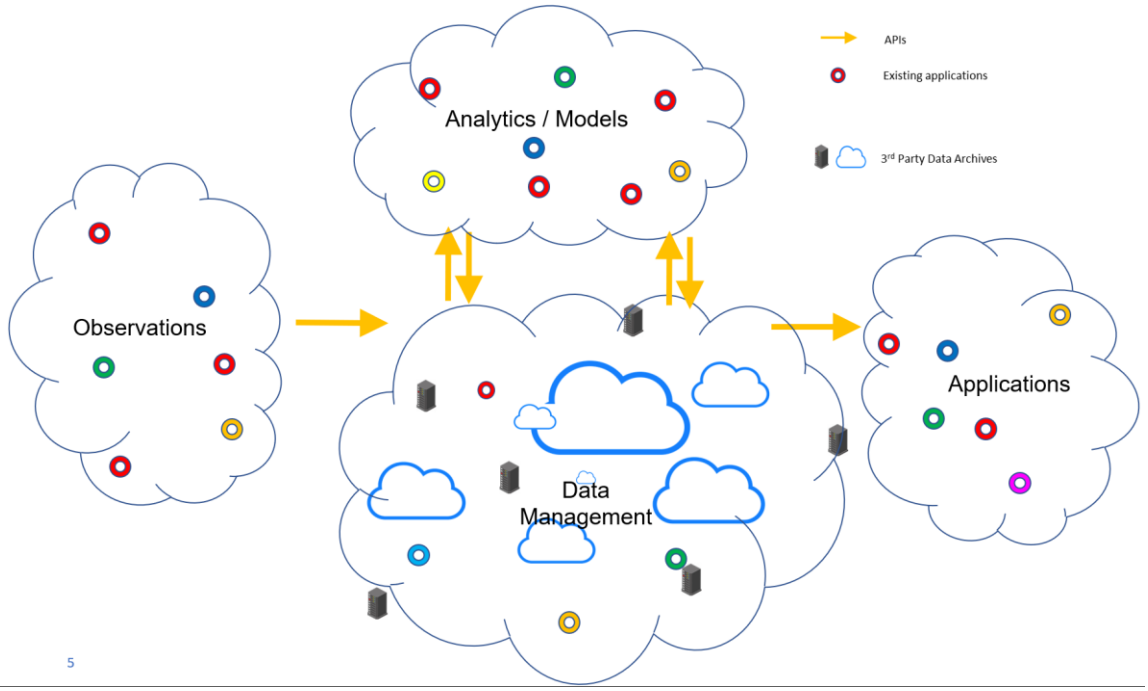
There are currently over 350 projects, programmes and other actions that have been endorsed by the Decade. This bottom-up approach to creating a global Ocean science community is gaining strength and more will be forthcoming. However, if left un-organized, the Decade project could, over time, become a huge de-centralized free-for-all. But there is power in numbers, so, the Decade is taking steps to implement a skeletal framework, an organizational infrastructure using a top-down approach.

Creating an Interoperable, Federated Digital Data Ecosystem

The digitisation, sharing, and management of data, information and digital knowledge are cornerstones for the Ocean Decade's success. The UN Ocean Decade's vision is that the Ocean community will rally their capacities to collectively co-design and construct a distributed digital system

Prior to the launch in 2021 of the Ocean Decade the IOC commissioned IODE to convene an inter-sessional Working Group to propose a strategy on Ocean data and information stewardship. The resultant IWG-SODIS report forms the starting point for this analysis of the structural elements required to implement a digital data ecosystem for ocean data.

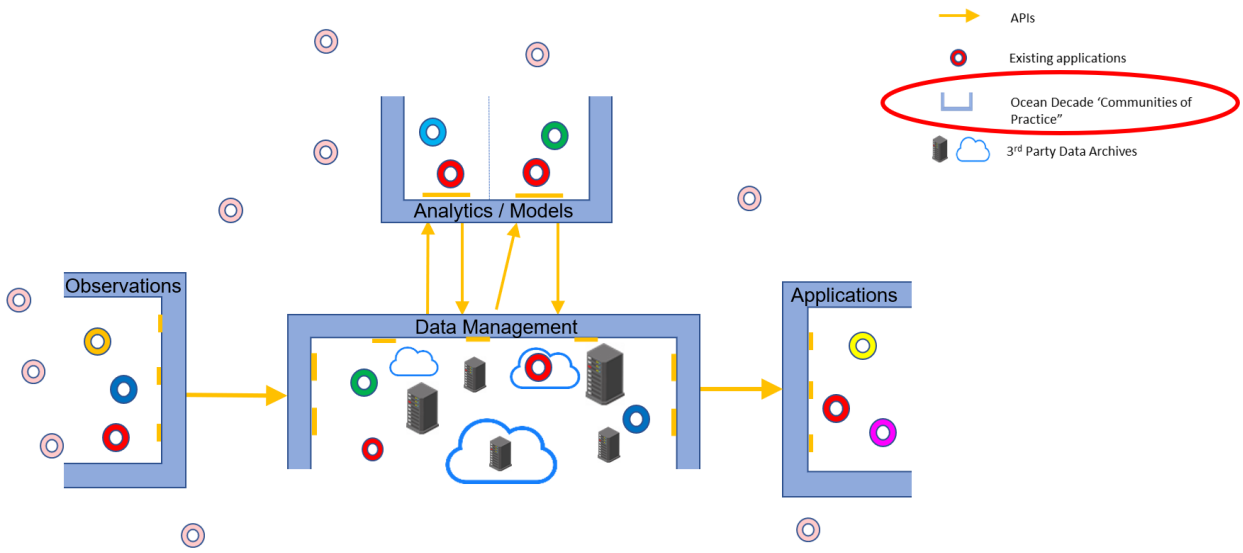
Stakeholders must be able to access, use, and contribute to this digital ecosystem through multiple interfaces tailored to their needs and capacities. No one system or central infrastructure will be able to implement this vision; instead, Ocean Decade stakeholders will be asked to contribute to the development of a distributed, robust, and collaborative "digital ecosystem" of interoperating parts, that leverages open, scalable, easily implementable, and responsive digital management frameworks.



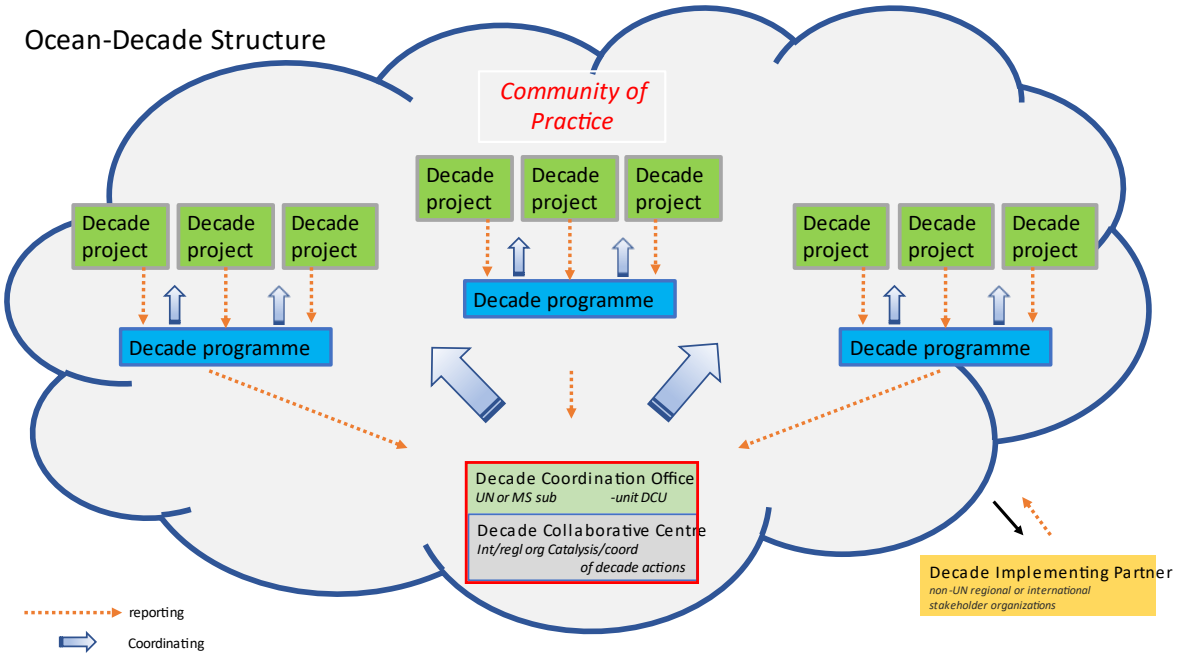
As proposed in the slides above and below, a possible structure to achieve this objective is to create 'Communities of Practise' around the four key themes of:

- Observations,
- Data Management,
- Analytics & Modelling (value extraction), and
- Applications (the knowledge and information delivery systems)

The intent is not to change way the science is done now within the Ocean community, but to coordinate it, to create an inter-operable ecosystem where Ocean data is open, accessible and useable by a vast range of participants.



Part 3: The Ocean Decade Coordinating Structure



Decade Actions

Decade Actions will be implemented by a wide range of proponents, over a wide range of thematic areas, throughout the Decade. Actions must be submitted for endorsement by the Ocean Decade. Endorsement will ensure that initiatives are collectively contributing to the priorities of the Ocean Decade.

When requesting endorsement, or registering their potential Actions, proponents will provide information on the alignment of their proposed Action with a defined set of criteria. One such key criteria specific to our topic of Data Management:

- ❑ The Action must ensure that all data and resulting knowledge are provided in an open access, shared, discoverable manner in accordance with the provisions of UNCLOS, and are appropriately deposited in recognized data repositories consistent with the IOC Oceanographic Data Exchange Policy[2] or the relevant UN subordinate body data policy.

Decade Actions include Programmes, Projects, as well as activities and/or contributions:

- A Decade **Project** is a discrete and focused undertaking. It may be regional, national or sub-national and it will typically contribute to an identified Decade Programme.
- A Decade **Programme** is typically global or regional in scale and will contribute to the achievement of one or more of the Ocean Decade Challenges. It is long-term, multi-year, interdisciplinary and multinational. A Programme will consist of component projects, and potentially enabling activities.
- **Decade Coordination Office (DCO) / Decade Collaborative Center (DCC).** Hosted by UN member states or entities (DCOs) or by international or major-regional non-UN organizations (DCCs) these key entities within the Decade organization structure will catalyze and coordinate Decade Actions at the regional and / or thematic level.
- **Decade Implementing Partners** will be non-UN regional or international stakeholder organisations that sit outside the formal governance and coordination structures. They will that provide targeted support to the IOCs Decade Coordination Unit and to DCOs / DCCs - in relation to different facets of Decade implementation.

Thematic Focus

Areas of common thematic focus will be grouped together using a defined organizational framework. Communities of Practice (CoP) are Decade stakeholder engagement networks that will convene ocean actors with common interests to facilitate connections and collaboration. Communities of Practice will be set up for key thematic areas; geographic, scientific or community based. All such registered networks will be members of, and make use of the facilities of, the Global Stakeholder Forum

An example of a thematic focus in the area of Data Analysis and Data Delivery for each of the key Decade Action categories are:

DCC: The French group MERCATOR has indicated that they will apply for endorsement as a DCC for Ocean Prediction (DCC-OP)

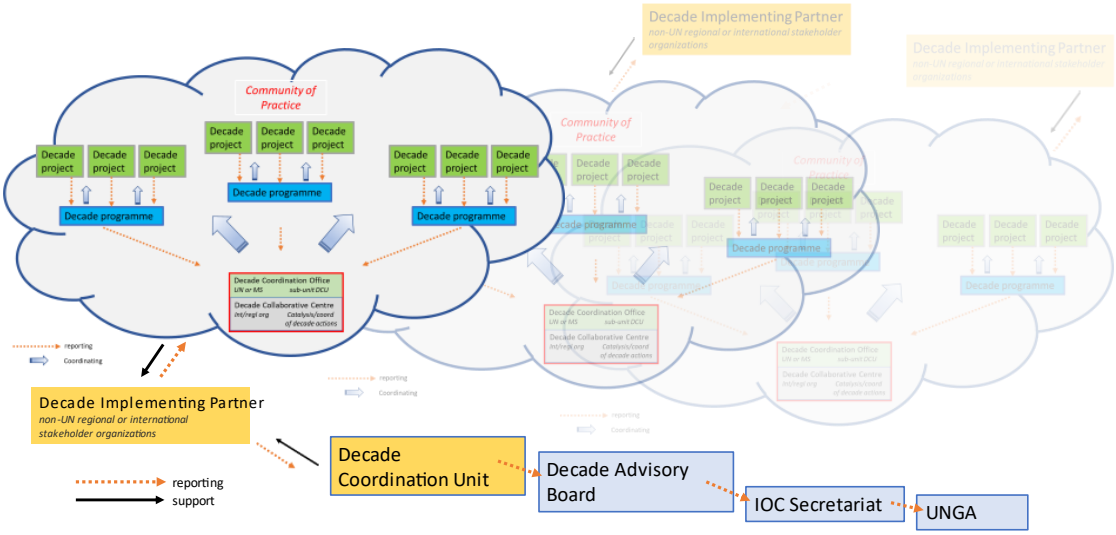
Programme: DITTO, a consortium of entities, is endorsed as a Decade Programme with a focus on Digital Twins. They have indicated an intent to fall within the scope of the DCC-OP

Project: CasSeaDi, an endorsed Project seeks to create a Digital Twin of the Caspian Sea, and will fall within the oversite framework of DITTO

Implementing Partner: Expressions of interest have been received to provide a central communications and organization service for the topic of Digital Twins within the Decade.

How will the Ocean Decade be coordinated?

The Ocean Decade will involve many partners and activities around the world, and it cannot be rigidly governed.



A simple, robust coordination structure will manage day-to-day implementation.

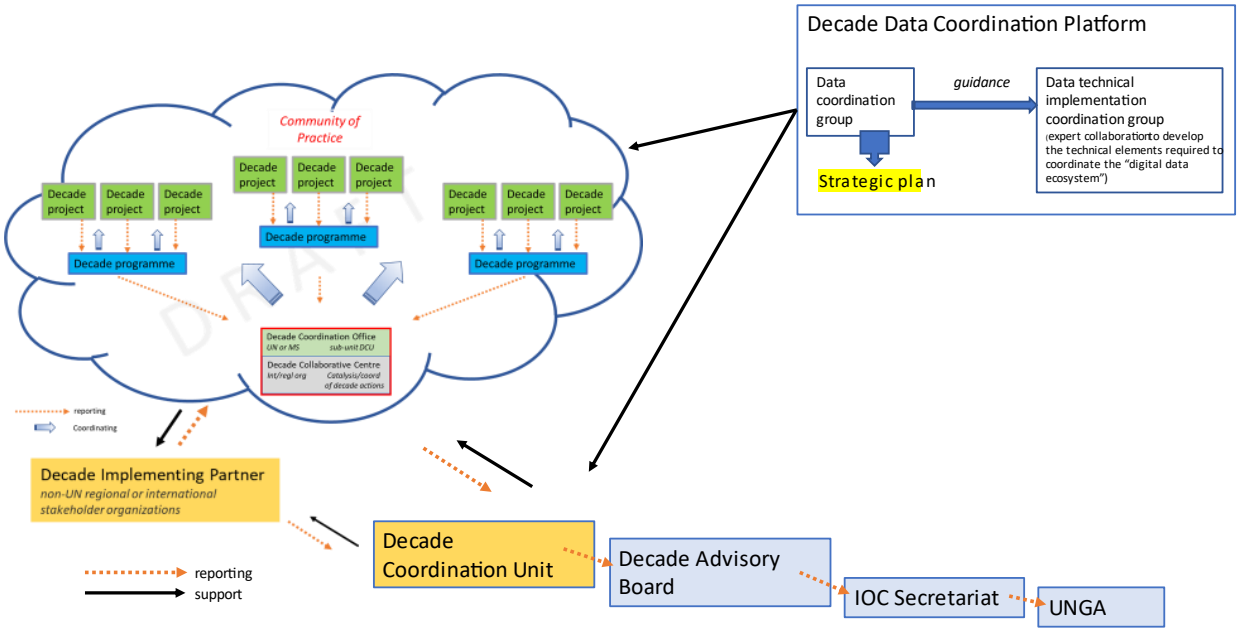
- Decade Actions, grouped within thematic / geographic **Communities of Practice** are the key centers of activity of the Decade
- The **Decade Coordination Unit**, to be located in the IOC Secretariat, will be the central hub for the coordination of Ocean Decade activities.
- The **Decade Advisory Board** will be a multi-sector, strategic advisory body that will provide advice on the implementation of the Ocean Decade. United Nations entities will be members of the Decade Advisory Board.
- The **Governing Bodies of the IOC** will provide intergovernmental oversight to the Ocean Decade and will report to the **United Nations General Assembly** through existing reporting processes.

Ocean Decade Data Coordination Platform

The Decade Coordination Unit, working with data management experts from UN entities, governments, industry, philanthropic Foundations, research institutes and other partners, will coordinate and promote the development of the Ocean Decade digital data ecosystem.

The main challenge of the Ocean Decade will be to build capacity and access to technology where it is still lacking, and to enhance efforts to rally and consolidate capacities across the academic, philanthropic, industrial, and governmental sectors. Throughout the Ocean Decade, Calls for Action will be launched for digital products to form part of the ecosystem.

In order to coordinate the collaboration between the vast number of partners that will contribute data to, as well as use data and products from, the digital data ecosystem an "**Ocean Decade Data Coordination Platform**" has been established.



The Ocean Decade Data Coordination Platform is comprised of the following resources:

Data & Knowledge Management Officer

- This full-time position sits within the DCU and has a mandate to develop and maintain the overall vison of data and knowledge management initiatives being carried out under the decade. The role

The Ocean Decade Data Coordination Group (DCG)

- This volunteer group of 25 global experts provides a forum for ongoing exchange and coordination between key actors in the ocean data and information domain needed to develop the "digital ecosystem".
- The DCG also provides advice to the Decade coordination and governance structures on the implementation of the data, information and knowledge actions contained in the Ocean Decade Implementation Plan.

The Ocean Decade Data Technical Implementation Coordination Group

- The Data Technical Implementation Coordination Group will provide a technical collaboration forum to develop the technical elements required to build the "data ecosystem". It is expected that this group will be formed in Q3 of 2022

ANNEX 2

DCO Observations – Costing Spreadsheet

ANNEX 3

DCO Observations - Job Descriptions

DCO Manager (P4 level)

Stakeholder Coordination, Facilitation and Engagement

Organization of (online) meetings for stakeholder communities (grouped or joint) to discuss the targets of the data chapter of the Decade IP, required infrastructure and methodologies, possible contributions from stakeholder communities, benefits to stakeholder communities,

Organization of (online) meetings with leaders of related, relevant Decade DCCs and DCOs, Programmes and Projects to ensure coherent actions and complementarity,

Promote cooperation with relevant IOC Programmes, related Projects, other relevant UN entities and stakeholder groups in order to advance the implementation of the Decade

Calls for Action

Based upon requirements identified during stakeholder meetings, draft calls for action to contribute to the expected outcomes

Discuss and coordinate draft calls with DCUs (as well as with DCCs and ongoing programmes, projects to ensure complementarity)

Monitoring and reporting

Organize regular reporting by all DCCs, programmes and projects within the scope of work of the DCO

Communications

Organize regular communication of all activities undertaken by DCCs, programmes and projects under the scope of work of the DCO, through appropriate communication and public awareness channels

Ensure communication channels between the GOOS DCO and other DCOs (and DCU) to ensure overall coordination across all IP chapters

Mobilisation of Resources

In close coordination with the DCU, DCCs, programmes and projects under the scope of the DCO, and supported by relevant communication efforts, undertake resource mobilization efforts to fund approved projects and programmes through financial or in-kind contributions by member states, other organizations, private sector and foundations

DCO Observations - Job Descriptions

Technical Implementation Lead (P3 level)

Stakeholder Coordination, Facilitation and Engagement

Engage and coordinate with the Data Coordination Group and the Technical Implementation Coordination Group that will be implemented within the Data Coordination Platform set up by the DCU.

Organization of (online) meetings with leaders of related, relevant Decade DCCs and DCOs, Programmes and Projects to ensure coherent actions and complementarity,

Establishment of technical or strategic sub-groups to co-design required actions

Make resources available to Decade actions in support of best practices for data management, scientific coordination and planning, tools and resources for developing capacity on research data management, and resources for data publishing, sharing and interoperability.

Promote cooperation with relevant IOC Programmes, related Projects, other relevant UN entities and stakeholder groups in order to advance the implementation of the Decade

Raise awareness and visibility of the Decade amongst diverse stakeholder groups and coordinate targeted communications activities in line with branding and messaging guidelines provided by the Decade Coordination Unit

Calls for Action

Based upon requirements identified during stakeholder meetings, draft calls for action to contribute to the expected outcomes

Discuss and coordinate draft calls with DCUs (as well as with DCCs and ongoing programmes, projects to ensure complementarity)

Monitoring and reporting

Organize regular reporting by all DCCs, programmes and projects within the scope of work of the DCO

Communications

Organize regular communication of all activities undertaken by DCCs, programmes and projects under the scope of work of the DCO, through appropriate communication and public awareness channels

Ensure communication channels between the GOOS DCO and other DCOs (and DCU) to ensure overall coordination across all IP chapters

Mobilisation of Resources

In close coordination with the DCU, DCCs, programmes and projects under the scope of the DCO, and supported by relevant communication efforts, undertake resource mobilization efforts to fund approved projects and programmes through financial or in-kind contributions by member states, other organizations, private sector and foundations

DCO Observations - Job Descriptions

Administrative Assistant (G2 level):

Stakeholder Coordination, Facilitation and Engagement

Organization of (online) meetings for stakeholder communities (grouped or joint) to discuss the targets of the data chapter of the Decade IP, required infrastructure and methodologies, possible contributions from stakeholder communities, benefits to stakeholder communities,

Organization of (online) meetings with leaders of related, relevant Decade DCCs and DCOs, Programmes and Projects to ensure coherent actions and complementarity,

Make resources available to Decade actions in support of best practices for data management, scientific coordination and planning, tools and resources for developing capacity on research data management, and resources for data publishing, sharing and interoperability.

Raise awareness and visibility of the Decade amongst diverse stakeholder groups and coordinate targeted communications activities in line with branding and messaging guidelines provided by the Decade Coordination Unit

Monitoring and reporting

Share the reports with the IODE community on a rolling basis to improve the reporting quality and extend the pool of experts

Other functions or responsibilities

General administrative tasks

GOOS DCO PROPOSAL - WORK PLAN / BUDGET / RESOURCE REQUIREMENTS

version 15/03/2022

Cost/year = 260 working days

P4 COST PA 212,000
P3 COST PA 180,996
G2 COST 52,000
(real cost should be less)

note: amounts from UNESCO BFU ON PROJECT APPOINTMENT BASIS

cash costs 2025 and 2015 increased for inflation

ACTIVITY	Details	2022	2022	2022	2,022	2023	2023	2023	2,023	2024	2024	2024	2,024	2025	2025	2025	2,025	2026	2026	2026	2,026
1. Stakeholder Coordination, Facilitation and Engagement		working days P4	working days P3	working days G2	cash	working days P4	working days P3	working days G2	cash	working days P4	working days P3	working days G2	cash	working days P4	working days P3	working days G2	cash	working days P4	working days P3	working days G2	cash
1.1 Organization of (online) meetings for stakeholder communities (grouped or joint) to discuss the targets of the data chapter of the Decade IP, required infrastructure and methodologies, possible contributions from stakeholder communities, benefits to stakeholder communities,	4 meetings/year online +1 in person, 1 day (2-3 hours) - (P: 10 days prep time/meeting, 1 day meeting, 4 days follow-up; G: 10 days prep/meeting, 1 day meeting)	65	-	55	30,000	65	-	55	30,000	65	-	55	30,000	65	-	55	30,000	65	-	55	30,000
1.2 Engage and coordinate with the Data Coordination Group and the Technical Implementation Coordination Group that will be implemented within the Data Coordination Platform set up by the DCU.	regular emails, participation in meetings of DCP and TICG (2 days/month), 1 in person meeting/year 2 mission days	-	24	-	4,000	-	24	-	4,000	-	24	-	4,000	-	24	-	5,000	-	24	-	5,000
1.3 Organization of (online) meetings with leaders of related, relevant Decade DCCs and DCOs, Programmes and Projects to ensure coherent actions and complementarity,	4 meetings/year online +1 in person, 1 day (2-3 hours) - (P: 10 days prep time/meeting, 1 day meeting, 4 days follow-up; G: 10 days prep/meeting, 1 day meeting)	65	24	55	30,000	65	24	55	30,000	65	24	55	30,000	65	24	55	30,000	65	24	55	30,000
1.4 Establishment of technical or strategic sub-groups to co-design required actions	done during meetings (sub-groups will work online) - 1/2 day per week	-	25	-	-	-	25	-	-	-	25	-	-	-	25	-	-	-	25	-	-
1.5 Make resources available to Decade actions in support of best practices for data management, scientific coordination and planning, tools and resources for developing capacity on research data management, and resources for data publishing, sharing and interoperability.	interaction/coordination with related projects, emailing of stakeholders, mailings, web site (P: 1/2 day/week; G: 1 day/week). cash cost = cost for IT services	-	20	50	2,000	-	20	50	2,000	-	20	50	2,000	-	20	50	2,500	-	20	50	2,500
1.6 Promote cooperation with relevant IOC Programmes, related Projects, other relevant UN entities and stakeholder groups in order to advance the implementation of the Decade	interaction/coordination with IOC programmes etc. P: 1/2 day/week (cash: travel to HQ or other)	20	20	-	10,000	20	20	-	10,000	20	20	-	10,000	20	20	-	10,000	20	20	-	10,000
1.7 Raise awareness and visibility of the Decade amongst diverse stakeholder groups and coordinate targeted communications activities in line with branding and messaging guidelines provided by the Decade Coordination Unit	general communication acivities (website, mailing, interaction with IOC comm unit, DCU comm, UNESCO comm) (P:1 day/week, G: 1 day/week)	-	35	50	5,000	-	35	50	5,000	-	35	50	5,000	-	35	50	5,000	-	35	50	5,000
- *Seek partnerships, and potential voluntary commitments, sponsorship and funding to strengthen the implementation and impact of world-class data eco-system in support of the Decade*	covered under activity 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Calls for Action																					
2.1 Based upon requirements identified during stakeholder meetings, draft calls for action to contribute to the expected outcomes	2 days/month (P4:1 day/month; G: 1 day/month)	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-
2.2 Discuss and coordinate draft calls with DCUs (as well as with DCCs and ongoing programmes, projects to ensure complementarity)	2 days/month	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-
3. Monitoring and reporting																					
3.1 Organize regular reporting by all DCCs, programmes and projects within the scope of work of the DCO	2 days/month	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-	25	25	-	-
3.2 Organize review of the mentioned reporting by relevant experts based on a "pool of experts" that will be established	staff cost included under 3.1 (cash: consultant)	-	-	-	15,000	-	-	-	15,000	-	-	-	15,000	-	-	-	15,000	-	-	-	15,000
3.3 Share the reports with the IODE community on a rolling basis to improve the reporting quality and extend the pool of experts	mailing (G: 1 day/month)	-	-	12	-	-	-	12	-	-	-	12	-	-	-	12	-	-	-	12	-
4.Communications																					
4.1 Organize regular communication of all activities undertaken by DCCs, programmes and projects under the scope of work of the DCO, through appropriate communication and public awareness channels	also covered under activities 1.6 and 1.7	15	15	-	-	15	15	-	-	15	15	-	-	15	15	-	-	15	15	-	-
4.2 Ensure communication channels between the GOOS DCO and other DCOs (and DCU) to ensure overall coordination across all IP chapters	also covered under activities 1, 2, 3	10	10	-	-	10	10	-	-	10	10	-	-	10	10	-	-	10	10	-	-
5. Mobilisation of Resources																					
5.1 In close coordination with the DCU, DCCs, programmes and projects under the scope of the DCO, and supported by relevant communication efforts, undertake resource mobilization efforts to fund approved projects and programmes through financial or in-kind contributions by member states, other organizations, private sector and foundations	1 day/month - P-4:10 months; P3: 12 months (cash: missions)	10	12	-	20,000	10	12	-	20,000	10	12	-	20,000	10	12	-	20,000	10	12	-	20,000
6.Coordination of Decade Actions																					
6.1 see previous activities																					
6.2 annual DCO conference (scientific conference to showcase progress) (incl temp staff for organization)		-	-	-	60,000	-	-	-	60,000	-	-	-	70,000	-	-	-	70,000	-	-	-	80,000
7. Other functions or responsibilities								38	-			-	-			-	-				
7.1 general administrative tasks		-	-	38	-	-	-	38	-	-	-	38	-	-	-	38	-	-	-	38	-
7.2 office operational costs		-	-	-	20,000	-	-	-	20,000	-	-	-	20,000	-	-	-	20,000	-	-	-	20,000
7.3 IT general costs		-	-	-	20,000	-	-	-	20,000	-	-	-	20,000	-	-	-	20,000	-	-	-	20,000
TOTALS		**260**	**260**	**260**	**216,000**	**260**	**260**	**298**	**216,000**	**260**	**260**	**260**	**226,000**	**260**	**260**	**260**	**227,500**	**260**	**260**	**260**	**237,500**
note: costing does not include office space, utilities etc assuming that the office will be donor																					
STAFF COST/YEAR (no adjustments taken into account over 5 years)	444,996	212,000	180,996	52,000		212,000	180,996	52,000		212,000	180,996	52,000		212,000	180,996	52,000		212,000	180,996	52,000	
CASH COST/YEAR (averaged over 5 years)	224,600				216,000				216,000				226,000				227,500				237,500
STAFF COST/ 5 YEARS	2,224,980																				
CASH COST/ 5 YEARS	1,123,000																				
TOTAL DCO COST/5 YEARS	**3,347,980**																				
TOTAL DCO COST/YEAR (averaged)	**669,596**																				

(No inflation correction included)