IOC/INF-1417
Paris, 8 June 2021
English only

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

INFORMATION DOCUMENT

LIST OF ENDORSED PROGRAMMES (OUTCOME OF 1ST CALL FOR ACTION)

Summary

This document summarises the process followed in the analysis of submissions to the Call for Decade Actions No. 01/2020 and described the Decade Actions that were endorsed as a result of this Call. Twenty-eight programmes and 33 contributions were endorsed based on the decision of the IOC Executive Secretary, and six UN-led Decade Actions were registered. The remaining submissions will be analysed in coming months.

1. Introduction

The First Decade Call for Actions (No. 01/2020) was open from 15 October 2020 to January 15 2021 and requested submissions across all themes and geographies for: (i) **Decade Programmes**: large-scale initiatives implemented at the global or regional scale and will contribute to the achievement of one or more of the Ocean Decade Challenges. These programmes will be long-term, multi-year, and typically interdisciplinary and multi-national. They will be comprised of component projects, which may or may not be fully or partially defined at the time of endorsement; and (ii) **Decade Contributions**: large-scale support for Decade Actions or the provision of significant in-kind or financial contributions to the coordination functions of the Decade. Contributions to the coordination functions could be either at the central level to support the functioning of the Decade Coordination Unit or at the decentralised level to support programmatic or regional coordination, for example through the hosting of a Decade Collaborative Centre.

The Call for Actions resulted in 215 programme submissions and 28 contribution submissions from 53 countries. The submissions demonstrated a high understanding of and alignment with the Ocean Decade vision and mission. A wide variety of proponents submitted programmes for consideration including Member States, research bodies and non-governmental organizations. Seven submissions (six programmes and an activity submission) were received from United Nations partners. All ocean basins were addressed within the submissions.

A rigorous multi-step, iterative review process was carried out within the limits of existing resources of the IOC Secretariat to evaluate the submissions and prepare information for discussion at two Interim Decade Advisory Board meetings that were held in April and May 2021. The steps in the review process were as follows:

- **Step 1: Structural Sorting of Submissions**: The submissions received covered a wide spectrum of types and scales of initiatives. The structural sorting categorised the submissions as follows: (i) programme / potential programme; (ii) project; (iii) activity: (iv) contribution; or (v) stakeholder engagement network. The criteria and definitions contained in the Implementation Plan were the starting point for the categorisation.

- **Step 2: Geographic and thematic analysis of programmes and potential programmes:** After the initial structural sorting was complete, the analysis focused identifying geographical and thematic commonalities across the programmes and potential programmes. The aim of this exercise was to identify synergies and thus potential areas for collaboration between programmes in keeping with the Decade's focus on collective action and impact. Programmes and potential programmes were loosely classified into initial Communities of Practice that will be built out throughout the Decade to ensure that proponents of Decade Actions can collaborate and create synergies.

- **Step 3: Identification of 'endorsement ready' and pipeline programmes for presentation to Interim Decade Advisory Board:** A first set of programmes was identified as being potentially 'endorsement ready'. The selection was based on an analysis of (i) the alignment with the Decade endorsement criteria; and (ii) the degree of readiness of the programme in terms of partnerships and the degree of development of the programme objective and activities. Proponents of programmes were contacted to request additional information that was identified by the technical task team as being required to allow a robust analysis. Remaining programmes that were not considered to be ready for endorsement based on the analysis and supplementary information provided by proponents, were included in a list of 'pipeline'

programmes that will be subject to further analysis, follow-up and dialogue over coming months before progressively being submitted to the Board for its consideration.

- **Step 4: Interim Decade Advisory Board Meetings:** Two meetings of the Interim Decade Advisory Board were held to review the endorsement ready and pipeline programmes. Extensive and detailed discussions were held during these meetings which are summarised in the meeting notes for IDAB Meeting No. 01/2021 and Meeting No. 02/2021. Following the Board meetings, proponents were advised of the results of the discussions and asked to provide supplementary information to address the comments or questions raised during Board discussions. In some cases this supplementary information was presented to the Board for further discussion. All supplementary information was reviewed by the IOC Secretariat and informed the endorsement recommendations contained below.

- **Step 5: Analysis of Contribution Submissions:** Contribution submissions were categorised as follows: (i) programmatic contributions (i.e. in-kind or financial resources to directly support Decade Actions); (ii) grant making facilities (i.e. third parties who will fundraise and make grants to achieve Decade priorities); (iii) national contributions (i.e. in-kind or financial support to national level Decade Actions); (iv) coordination structures (i.e. offers to host Decade Coordination Offices or Decade Collaborative Centres); (v) impact investment (i.e. offers to support Decade Actions through impact investment); and (vi) in-kind contributions (i.e. resources made available for the use of the Ocean Decade). The analysis of contributions was carried out by the IOC Secretariat but excluded at this stage detailed analysis of grant-making facilities, coordination structures and impact investment – all of which will need to be subject to more thorough analysis and due diligence processes in coming months.

The due diligence process described in Memo IOC/VR/21.117/JB/AC/ic was followed for all submissions considered for endorsement.

2. Endorsed Decade Actions

- ***Decade Programmes:*** Based on the analyses described above, the Executive Secretary endorsed 28 Decade programmes. These programmes are listed in Annex 1.

- ***Decade Contributions:*** Based on the analysis described above, the Executive Secretary endorsed 33 Decade contributions. These contributions are listed in Annex 2.

- ***UN-led Decade Actions:*** Six Decade Actions were registered by UN partners. These Decade Actions are listed in Annex 3.

3. Treatment of remaining submissions to Call for Decade Actions No. 01/2020

The analysis of remaining submissions from the Call for Decade Actions No. 01/2020 will continue in coming months. All proponents have been notified of the status and next steps in the treatment of their submission.

ANNEX 1: ENDORSED DECADE PROGRAMMES

This Annex presents each of the Decade programmes have been endorsed. It provides information on the lead partner and the summary of the Decade Action provided by the proponent. The comments and recommendations of the Interim Decade Advisory Board on each programme can be found in meeting notes for Interim Decade Advisory Board Meeting No. 01/2021 and Meeting No. 02/2021.

No.	Decade Action Name	Lead Partner	Summary Description
12	Ocean Decade Research Programme on the Maritime Acoustic Environment	Interagency Working Group for Ocean Sound and Marine Life	Sound is a persistent yet dynamic component of the maritime environment reflecting both physical and biological properties and phenomenology that define oceanography. Understanding sound in the ocean is critical to support users of, and life within, the ocean. The UN Research Programme on the Maritime Acoustic Environment will establish a comprehensive science-based program aimed at measuring and objectively characterizing underwater acoustic environments - the physical, biological and anthropogenic - at regional to global scales. It will foster new scientific knowledge, technologies, approaches to data collection and dissemination that facilitate the use of sound for analysing, evaluating and predicting ocean-life systems.
14	The Coral Reef Sentinels: A Mars Shot for Blue Planetary Health	The Smithsonian Institution	The Coral Sentinel System is a transformative program to deploy autonomous, low-cost robots to monitor the health of coral reefs around the world in near real-time. The actionable data this program delivers will enable rapid conservation interventions to protect these reefs from harm while ensuring local ecological, economic, and cultural health. The audacious goals of this program are to develop and demonstrate a scalable monitoring, modelling and decision-support system for reef science and conservation and to adapt each set of solutions to local needs. We plan to move beyond monitoring coral reef decline to finding novel ways to save them.
15	Early Career Ocean Professionals	The ECOP programme is conceived as an enabling polycentric framework at this stage and as such does not currently have a lead institution	The ECOP Programme mission is to incorporate new ways of thinking into global ocean sustainability and stewardship challenges through diverse engagement. The ECOP programme will achieve this by empowering ECOPs with meaningful networking and professional development opportunities to engage with each other and with local to global institutions through the framework of the UN Ocean Decade. The vision of the ECOP Programme is to elevate and strengthen the diverse perspectives of new generations of ocean professionals in a collective voice, ensuring that knowledge is transferred between experienced and early-career ocean professionals, to promote ocean sustainability for "The Ocean We Want"
16	Ocean Voices: Building transformative pathways to achieve the Decade's outcomes	Nippon Foundation Ocean Nexus Centre, EarthLab, University of Washington	The contribution of ocean science to sustainable development is determined by people. Understanding the actors involved, their culture and wellbeing, and how power dynamics and decision-making processes influence our oceans is crucial to achieve the goals of the Decade and ensure knowledge, strategy and governance frameworks enable all to participate in, contribute to and benefit equitably from the Decade. The Oceans for Everyone program will conduct research, incubate ideas, facilitate critical discussions and convene capacity building partnerships to identify barriers and pathways and enabling conditions for equity in the Decade.
17	Marine Life 2030: A Global Integrated Marine Biodiversity Information Management and Forecasting System for Sustainable Development and Conservation	Smithsonian Institution	Marine Life 2030 will establish the globally coordinated system to deliver actionable, transdisciplinary knowledge of ocean life to those who need it, promoting human well-being, sustainable development, and ocean conservation. Within a decade, Marine Life 2030 will unite existing and frontier technologies and partners into a global, interoperable network and community of practice advancing observation and forecasting of marine life. This network of networks will link technical, management and policy stakeholders to build and exchange capacity for advancing society's grand challenges of managing activities for a healthy and resilient ocean and the vibrant and healthy society that depends on it.
26	Ocean Biomolecular Observing Network	The Partnership for Observation of the Global Ocean (POGO)	Ocean life - from viruses to whales - is built from "biomolecules." Biomolecules such as DNA infuse each drop of ocean water, grain of sediment, and breath of ocean air. The Biomolecular Ocean Observing Network (BOON) will develop a global system that will allow science and society to understand ocean life like never before. The programme will transform how we sense, harvest, protect, and manage ocean life, which faces multiple stresses including pollution, habitat loss, and climate change. It will also help communities detect biological hazards like harmful algal blooms and pathogens, and be a key component of next-generation ocean observing systems.
28	ForeSea - The Ocean Prediction Capacity of the Future	OceanPredict	ForeSea's vision is for strong international coordination and community building of an ocean prediction capacity for the future. The overarching goal are to (1) improve the science, capacity, efficacy, use, and impact of ocean prediction systems and (2) build a seamless ocean information value chain, from

No.	Decade Action Name	Lead Partner	Summary Description
			observations to end users, for economic and societal benefit. These transformative goals aim to make ocean prediction science more impactful and relevant.
34	Ocean Cities, an international network of cities in harmony with the marine environment	Mediterranean Centre for Marine and Environmental Research (CMIMA-CSIC) Institut de Ciències del Mar (ICM-CSIC) Unitat de Tecnologia Marina (UTM-CSIC) The ICM together with the Marine Technology Unit (Unidad de Tecnologia Marina, UTM), responsible for the management of the Spanish oceanographic fleet, make up the Mediterranean Centre for Marine and Environmental Research (CMIMA)	Ocean Cities (OC-NET) is a network of marine cities committed with sustainability, permeability and regeneration of natural marine environments, for and with its population. OC-NET is an interdisciplinary and bottom-up transformative program, which will change how coastal cities and their inhabitants perceive, interact and evolve with the ocean, from the surrounding waters to the single global ocean. Cities concentrate most of the world's population. Thus, they have a major impact on land-ocean ecosystems and climate, and are among the least resilient environments. OC-NET combines scientific knowledge, research synergies, and social awareness to effectively impact the city's evolution and the ocean's sustainability. Starting on June 8, 2021, and initially running for 5 years (07/06/2025), with 2 years of implementation plus 3 years of operation. OC-NET will naturally scale up in time as a result of its own process of reflection and action, so that it may eventually extend for the entire decade.
57	Challenger 150 - A Decade to Study Deep-Sea Life	DOSI - Deep Ocean Stewardship Initiative	Challenger 150 is a global cooperative devoted to delivering the science we need to sustainably manage the deep ocean. At its heart is the development of deep-ocean expertise, particularly in economically-developing nations, in order to achieve a global generation of stewards working together to maintain the integrity of deep-ocean ecosystems. Furthermore, through supporting the development of new technologies and the expansion of observations, Challenger 150 aims to advance understanding of the diversity, distribution, function and services provided by deep-ocean biota; and to use this new knowledge to educate, inspire, and promote better management and sustainable use of the deep ocean.
63	Fisheries Strategies for Changing Oceans and Resilient Ecosystems by 2030	Gulf of Maine Research Institute	Fish-SCORE 2030 will bring together scientists, fishers, resource managers, community practitioners, and policymakers to drive marine fisheries toward climate resilience by 2030. We will develop assessment and modelling frameworks that synthesize complex ecological, social, cultural, economic, and governance dimensions of fishery systems in changing oceans to illuminate specific vulnerabilities and actionable adaptation options. We will delve into evidence and experiences from fishery systems around the globe to find what works in the real world. We will nurture partnerships to apply and improve our frameworks, and put to them to work to change the climate outlook of local and regional fisheries.
64	Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development	World Maritime University - Sasakawa Global Ocean Institute	The Empowering Women for the Ocean Decade Programme will enhance capacity to explore and promote women's empowerment and gender equality in the conduct of ocean science and in science-dependent governance systems. Research findings will identify key barriers and good practice contributing to a proposed Strategy and Action Plan to help deliver equal opportunities for full participation and leadership by women at all levels of ocean science under the Ocean Decade. The Programme will enhance ongoing collaborations with partners including government agencies, intergovernmental organizations, non-governmental organizations, research institutes, universities, and individuals to deliver substantive research outputs contributing to transformative actions.
69	Cultural Heritage Framework Programme	Ocean Decade Heritage Network (ODHN)	The Cultural Heritage Framework Programme (CHFP) provides a framework within which Decade Actions relating to cultural heritage can be encouraged, shared and supported, so that the impacts of such actions in delivering sustainable development are greater together than they would be individually. The CHFP offers an efficient interface between heritage and the Ocean Decade, providing advice and assistance to other programmes, projects and activities in key areas such as: showcasing integration of heritage and ocean science; facilitating co-design; managing data and knowledge; developing capacity; enabling greater diversity and representation; encouraging ocean literacy and public engagement and outreach; and evaluating impact.
76	Global Ocean Oxygen Decade	GEOMAR Helmholtz Centre for Ocean Research Kiel, on behalf of the Global Ocean Oxygen Network (GO2NE)	Oxygen dissolved in seawater supports the largest ecosystems on the planet. It is alarming that the ocean is losing oxygen, termed ocean deoxygenation, at a rapid rate, primarily due to global warming by anthropogenic greenhouse gas emissions, and pollution by nutrients and organic wastes particularly in coastal waters. The Decade Programme will raise global awareness about ocean deoxygenation, provide knowledge for action and develop mitigation and adaptation strategies and solutions to ensure continued provision of ecosystem services, and minimize impacts on the ocean economy through local, regional, and global efforts, including transdisciplinary research, innovative outreach, and ocean education and literacy.
77	One Ocean Network for Deep Observation	Ifremer (Institut Français de recherche pour l'exploitation de la mer)	The deep ocean remains the last unexplored frontier on our planet. A place that holds secrets to the origin of life and could provide ecosystem goods and services for the sustainable development of humankind. Despite being out of sight, it is impacted by human activities and faces growing pressures. High-technological devices and expertise from multiple scientific areas are needed to allow us unveiling the

No.	Decade Action Name	Lead Partner	Summary Description
			unknown. For this, we propose a step-change in deep-sea science through the development of observatories and surveying technologies at various sites of the global ocean. This coordination will help us understand how the deep-sea ecosystems are functioning, how they are affected by climate change and human activities, as well as contribute to protect people from natural hazards. Synergies are expected with other relevant Decade initiatives, such as those coordinated by DOOS, DOSI/Challenger150, Smart Cables, POGO and GOOS/ARGO International.
84	Pacific solutions to save our ocean: an integrated ocean science programme towards a healthy Blue Pacific Continent to sustain future generations.	Pacific Community (SPC)	This Ocean Decade action aims to leverage the spate of national ocean policies launched (NOPs) in the Pacific in recent years that all address a need for greater integrated ocean management (IOM). This action seeks to increase scientific capacity and create opportunities for ocean science to feed into decision making. This will be achieved by focusing on three major aspects including regulatory frameworks, decision support systems, and increased considerations for Pacific culture and context. As custodians of the world's largest marine ecosystems, the Blue Pacific Continent, we seek to save our Ocean and provide solutions to some of our existential challenges such as climate change.
90	Sustainability of Marine Ecosystems through global knowledge networks	International Council for the Exploration of the Sea (ICES) The North Pacific Marine Science Organization (PICES)	SMARTNET will establish a global knowledge network (GKN) for ocean science by strengthening and expanding the collaboration of ICES/PICES and partner organizations. It will support and leverage ICES/PICES member countries' activities related to UNDOS, by emphasizing areas of mutual research interest including climate change, fisheries and ecosystem-based management, social, ecological and environmental dynamics of marine systems, coastal communities and human dimensions, and communication and capacity development. It also incorporates strategies to facilitate UNDOS cross-cutting inclusivity themes relating to gender equality, early career engagement, and involvement of indigenous communities and developing nations in the planning and implementation of joint activities.
97	An Observing Air-Sea Interactions Strategy (OASIS)	SCOR Working Group #162 -- Developing an Observing Air-Sea Interactions Strategy (OASIS)	Air-sea exchanges of energy, moisture, and gases drive and modulate the Earth's weather and climate, influencing life, including our own. These air-sea interactions fuel the hydrological cycle and affect precipitation across the globe. Air-sea interactions affect the distribution of carbon dioxide between the atmosphere and ocean, how seawater flows and winds blow, and how pollutants floating on the ocean surface move - information critical to policymakers, industry, and civil society. The Observing Air-Sea Interactions Strategy (OASIS) PROGRAMME will provide observational-based knowledge to fundamentally improve weather, climate and ocean prediction, promote healthy oceans, the blue economy, and sustainable food and energy.
107	The Nippon Foundation-GEBCO Seabed 2030 Project	The Nippon Foundation-GEBCO Seabed 2030 Project	Ocean knowledge is critical to understanding our planet yet today we know little about the shape of the ocean floor with 81% yet to be fully mapped. The Nippon Foundation-GEBCO Seabed 2030 Project is a collaboration between The Nippon Foundation and the General Bathymetric Chart of the Oceans (GEBCO) to produce the definitive bathymetric map of the entire ocean by 2030. This is driven by strong motivation to empower the world to make policy decisions, use the ocean sustainably and undertake scientific research informed by detailed understanding of the ocean floor. The map will be freely available for all users.
109	The Hydrous presents: The Decade of Ocean Empathy	The Hydrous	The Decade of Ocean Empathy is inspired by the Decade of Ocean Science for Sustainable Development and brings human elements like empathy, communication, and creative problem-solving into marine science and conservation to generate ocean connection and stewardship. Led by 501c3 non-profit The Hydrous, the Decade of Ocean Empathy leverages human-centered design, learning science, and emerging technologies to contribute to Decade Outcomes 6: an accessible ocean and 7: an inspiring and engaging ocean. Objectives of this programme are to 1) create - and build capacity for - immersive virtual ocean media, 2) lead world-class research on ocean learning and literacy, and 3) build and foster an international community of multidisciplinary ocean solutionist fellows.
129	Deep Ocean Observing Strategy	Deep Ocean Observing Strategy	DOOS represents an interconnected network of deep-ocean observing, mapping, exploration, and modelling programs working together for the coming decade to 1) characterize the physics, biogeochemistry and biology of the deep ocean in space and time, 2) establish a baseline required to understand changes to its habitats and services, and 3) provide the information needed to have a healthy, predicted, resilient and sustainably-managed (deep) ocean. DOOS will promote the human capital and observing infrastructure needed to address critical scientific and management questions related to the climate, biodiversity and sustainability, while growing a diverse and inclusive next generation of deep-ocean leaders.
137	Digital Twins of the Ocean -	GEOMAR Helmholtz Centre for Ocean	DITTO will establish and advance a digital framework on which all marine data, modelling and simulation

No.	Decade Action Name	Lead Partner	Summary Description
	DITTO	Research Kiel and Kiel University	along with AI algorithms and specialized tools including best practice will enable shared capacity to access, manipulate, analyse and visualise marine information. It will enable users and partners to create ocean related development scenarios addressing issues such as energy, mining, fisheries, tourism and nature based solutions. Digital-Twins can quantify benefits and environmental change and provide powerful visualizations. DITTO will empower ocean professionals including scientific users to create their own local or topical digital twins of "their ocean issue' by using standard workflows.
138	Blue Climate Initiative - Solutions for People, Ocean, Planet	Blue Climate Initiative (sponsored by Tetiaroa Society)	Human health and well-being depend upon a healthy ocean for needs as diverse as food, oxygen, a stable climate, moderate weather and livelihoods - and a well-managed and thriving ocean can greatly contribute to improved human health and well-being. The Blue Climate Initiative brings together scientists, community groups, engineers, entrepreneurs, investors, government leaders and global influencers to collaboratively identify, develop and implement science-based programs to protect the ocean and use the ocean's remarkable power and potential to tackle climate change and other urgent issues of our time, from renewable energy and sustainable food supplies to human health and resilient ocean economies.
144	CoastPredict - Observing and Predicting the Global Coastal Ocean	Alma Mater Studiorum University of Bologna	CoastPredict will transform the science of observing and predicting the Global Coastal Ocean, from river catchments, including urban scales, to the oceanic slope waters. It will integrate observations with numerical models to produce predictions with uncertainties from extreme events to climate, for the coastal marine ecosystems (their services), biodiversity, co-designing transformative response to science and societal needs. CoastPredict will re-define the concept of the Global Coastal Ocean, focusing on the many common worldwide features, to produce observations and predictions of natural variability and human-induced changes in the coastal areas and upgrade the infrastructure for exchange of data with standard protocols.
161	Deltas associated with large rivers: Seeking solutions to the problem of sustainability	The State Key Laboratory of Estuarine and Coastal Research (SKLEC), East China Normal University.	River deltas are critical for human development. However, the delta is facing threats such as increased erosion, increased flood risk, and shrinking salt marshes and mangroves. This has become a global problem and requires international cooperation to solve it. We propose to study the present status and threats of 25 representative deltas, the methodology for new delta blueprints, the blueprints dealing with critical delta characteristics, and the sustainability of the delta system and its capacity to support regional development for deltas of different physical processes and ecological and economic importance. The objective is to support sustainable development in delta regions.
172	Global Ecosystem for Ocean Solutions (GEOS)	Ocean Visions	GEOS will develop and deploy a series of equitable, durable, and scalable ocean-based solutions for addressing climate change and Ocean Decade's challenges. It will achieve this through three synergistic mechanisms: the GEOS Network made up of researchers, engineers, innovators, investors, decision-makers, and others, which will co-design the GEOS Task Forces for the co-creation of solution-delivering projects, and the GEOS Innovation Engine that will prototype and deploy those solutions. GEOS initial projects focus on ocean-based carbon dioxide removal, providing adaptation tools to coastal communities, and improving ocean-based human health, with further projects to be developed throughout the Ocean Decade.
176	Global Estuaries Monitoring (GEM) Programme	State Key Laboratory of Marine Pollution, City University of Hong Kong	The Global Estuaries Monitoring Programme is co-designed by partners and stakeholders with a view to developing a global monitoring network to monitor environmental contaminants (e.g. pharmaceutical residues, emerging pollutants of concern, microplastics, pathogens etc.) in major urbanised estuaries worldwide. We will develop standard sampling and analysis methods with provision of training opportunities. This will facilitate capacity building for global estuaries monitoring. Results of the Programme will reveal the pollution situation around the globe, identify the estuaries that require attention and improvement, recommend priority contaminants for control, and promote best practices to combat the pollution problems and thereby achieve cleaner estuaries.
189	Joint Exploration of the Twilight Zone Ocean Network	National Oceanography Centre, UK	JETZON focuses on the ocean region spanning 200m to 1000m depth. This contains the largest and least exploited fish stocks of the world's oceans. The Twilight Zone also plays a major role in global biogeochemical cycles and the sequestration of carbon dioxide. However, it is poorly understood. This ignorance is dangerous. The Twilight Zone is under multiple stresses, including fishing, deep-sea mining, climate change and proposed CO2 mitigation methods. With the majority of the Twilight Zone outside national boundaries, its size and inaccessibility means that its study is only possible through coordinated international action. This is the aim of JETZON.
219	Ocean Acidification Research for Sustainability - Providing society with the	Global Ocean Acidification Observing Network (GOA-ON)	OARS will foster the development of the science of ocean acidification including the impacts on marine life and sustainability of marine ecosystems in estuarine-coastal-open ocean environments. The programme will address the SDG target 14.3 ‘Minimize and address the impacts of Ocean Acidification (OA), including

No.	Decade Action Name	Lead Partner	Summary Description
	observational and scientific evidence needed to sustainably identify, monitor, mitigate and adapt to ocean acidification; from local to global scales		through enhanced scientific cooperation at all levels'. Key components include: 1) enhancing regional collaborative efforts, 2) coordination of capacity building in science, 3) co-design and implement observation and research to address the threat of ocean acidification, and 4) communication and delivery of the outputs to policy makers and communities.

ANNEX 2: ENDORSED DECADE CONTRIBUTIONS

This Annex presents each of the endorsed Decade contributions.

Unique ID	Name of Contribution	Lead Partner	Summary
Programmatic Contributions			
1	IOGP Environmental Genomics Joint Industry Programme	The International Association of Oil and Gas Producers (IOGP)	The IOGP Environmental Genomics Joint Industry Programme (eDNA JIP) was launched in June 2019 to coordinate research aimed at exploring the application of eDNA-based analyses in environmental assessments and monitoring of oil and gas offshore and onshore operations. • Oil and gas companies undertake a variety of ecological assessments aimed at characterizing and monitoring the environments in which they operate. • Available conventional approaches for ecological assessment, such as direct sampling and visual/acoustic observation, tend to be more time consuming, expensive, and yield less comprehensive data. • Environmental DNA (eDNA) can be used to detect organisms and estimate biodiversity. This method can help to reduce field time, sampling cost, and be less invasive while often significantly improving the information found by the assessments.
42	IOGP Sound and Marine Life (SML) Joint Industry Programme (JIP)	The International Association of Oil and Gas Producers (IOGP)	The SML JIP, administered by IOGP, is a partnership of multiple oil and gas companies and the International Association of Geophysical Contractors (IAGC). Established in 2006, the oil and gas exploration and production industry has adopted a pro-active role to improving scientific knowledge and understanding of potential impacts associated with underwater sound, through the establishment of the Sound and Marine Life Joint Industry Programme (SML JIP). Research projects funded through the JIP are categorised into several disciplines: • Sound source characterisation and propagation • Physical effects of sound on the hearing system • Behavioural responses and biological significance • Mitigation and monitoring • Development of research tools.
30	Marine.Science	Bertarelli Foundation	The Bertarelli Foundation's marine science programme (Marine.Science) was established to advance our understanding of large marine protected areas so they can be better managed. Our focus is on the Indian Ocean, where we address the protection of marine biodiversity and securing ocean health and use science to inform management and conservation in the region. Our highly collaborative and interdisciplinary projects are led by some of the world's leading marine scientists who are pushing the boundaries of their fields. We have a strong emphasis on effective and innovative communication, capacity building and increasing regional opportunities and access to marine science.
98	Flourishing Oceans - Plastics and Human Health	Minderoo Foundation	Human health is critically dependent on ocean health and yet we continue to pollute our oceans by massive dumping of plastic waste. Our proposed Decade Program will act as a lever to reduce plastic pollution by focussing on the harmful effects of plastic chemicals and micro-/nano-plastics on human health through knowledge brokering, developing novel infrastructure and measurement techniques as well as filling research gaps. However, evidence is not enough. We will therefore collaborate and communicate via a Global Network of clinicians, scientists, legal and regulatory experts, NGOs, governments and science communicators to drive urgent change in chemical regulation and policy.
99	Global Fishing Index	Minderoo Foundation	The Global Fishing Index (GFI) is an ongoing, global study that measures country-level progress towards ending overfishing and restoring fish stocks to biologically sustainable levels (SDG 14.4). The Index reports on both the state of fish stocks and fisheries governance for over 140 maritime countries, providing a means of identifying global priority areas for action, as well as key policy gaps at the regional and national level. The Global Fishing Index will be published in May 2021 and updated every two years through the Decade of Ocean Science (and beyond) to track improvements in fisheries sustainability.
162	Norway-Pacific Ocean-Climate Scholarship Programme	University of Bergen, Norway	N-POC is an ambitious partnership in research and PhD training between the University of Bergen (UiB) in Norway, and the regional University of the South Pacific (USP). N-POC is funded for 2021-2024 by Norway's Ministry of Foreign Affairs and the Norwegian Agency for Development Cooperation (Norad), and involves a programme of 24 fully funded PhD scholarships at USP within ocean and climate research, ranging from the natural sciences to the social sciences and humanities. PhD candidates will be recruited from all 12 member countries of the USP, as well as Papua New Guinea, Federated States of Micronesia and Palau.
168	Reef Recovery 2030	Great Barrier Reef Foundation	A quarter of ocean life and a billion of the world's people depend on coral reefs. Yet our reefs are under imminent threat from climate change and local impacts. Current approaches are insufficient to protect the world's coral reefs. The window to act is rapidly closing. Reef Recovery 2030 is dedicated to saving the Great Barrier Reef and supporting global coral reef conservation. Led by the Great Barrier Reef Foundation, in partnership with the world's leading coral reef scientists, Australian Government, reef managers, businesses, First Nations people and local communities, Reef Recovery 2030 will boost the resilience of these unique reef ecosystems and the people that rely on them. This is a decade long, one billion-dollar collective effort to turn the tide on coral reef decline globally.
188	Esprit de Velox	Association Esprit de Velox	Esprit de Velox has been developing a bio-inspired, Zero--Impact vessel, dedicated to Responsible Research and Preservation Operations, open to Collaborative Intelligence and embedded R&D, available to the Research and Innovation communities, pioneering at sea non-invasive and interdisciplinary Research, understanding and preserving the Earth system, from tropical to polar navigation zones. The environmental neutrality and energy autonomy of the ship are key assets, which allow clean data and complex works. The vessel is expected to achieve a world's first, without disturbing the ecological balance and embodying the decarbonisation of maritime transport. The programme is a triple world's firsts for a >500 UMS vessel: . Wind main propulsion . Carbon-free Renewable Energy Island grid . Recyclable composites structure

Unique ID	Name of Contribution	Lead Partner	Summary
190	Universeum Ocean Science Lab	Universeum - Ocean Science Lab	Universeum Ocean Science Lab is a national science centre and an arena for education in science, technology and sustainable development. The Lab focuses on marine life, addressing ocean literacy to the broader public, where science can be communicated, translated and put into context, and further disseminated; facilitated by state-of the art technologies. The Lab will function as a service provider, bringing relevant stakeholders together forming a unique platform that aims to connect and educate people. Key areas where projects and activities will evolve around are innovation, data modelling, and ecosystem-based ocean management.
202	MONACO EXPLORATIONS	MONACO EXPLORATIONS	The programme is composed of collaborative international expeditions combining scientific research, public outreach and government cooperation. It will investigate selected marine areas worldwide with the following objectives: - to understand through a multidisciplinary scientific approach the exosystemic status and functioning of the area explored and to advise stakeholders through a transdisciplinary approach (sustainability science); - to share the issues and knowledge with the greatest number of people through an ambitious outreach programme; - to mobilize governments, through diplomatic action, by providing information and analyses to support the sustainable management of the selected marine areas.
226	AGU's Mentoring365: UN Decade of Ocean Sciences	American Geophysical Union	The American Geophysical Union (AGU) is the pre-eminent scientific society in the Earth and space sciences, representing more than 130,000 scientists in more than 138 countries, and it is the world's largest home for research dedicated to geoscience, its related impacts, and solutions. Our members work in academia, industry, the non-profit sector, and government â€“ with many representing the ocean sciences sector. AGU programs include serving as a scholarly publisher, convening virtual and in-person events, and providing career support at all levels. AGU has been involved in the planning process for the Decade over the last few years and remains committed to supporting and partnering in implementing its vision. AGU understands the essential role mentoring plays in developing the professional skill set of student and early career scientists and to guide their careers. However, mentoring opportunities through professional societies have traditionally only been available to in-person attendees of annual conferences. Even before the limitations due to the COVID-19 pandemic, a large percentage of students did not attend scientific conferences and did not have exposure to these professional development and networking opportunities. AGU's Mentoring365: UN Decade of Ocean Sciences increases equitable access to mentoring through a virtual global peer-to-peer mentorship program that will support and cultivate the career pipeline of those engaging in the Decade, particularly through the Early Career Ocean Professionals Programme. M365 matches and provides mentors and mentees with structured, relationship-building tools to develop and accomplish focused career goals. These connections range from one-on-one to small group discussions and often transcend national borders to bring a global perspective to the mentoring experience. The mentoring platform can be integrated into the online experience for specific Decade events or related activities including Ocean Sciences Meeting, Ocean Visions Summit, and AGU's Annual Fall Meeting with more than 25,000 scientists in attendance. In addition, the platform can also leverage other training capacities of AGU to further enhance the mentoring experience, such as professional trainings on communicating effectively with policy makers, the media, and public as well as fellowship opportunities through the Thriving Earth Exchange to learn how to work directly with local communities to co-create solutions. In discussions with representatives of the Early Career Ocean Professionals Programme, there was strong interest in leveraging M365 to support their programming needs and they have provided a letter of support for this proposal (attached).
239	Ocean Sciences Meeting 2022-2030	American Geophysical Union	Ocean Sciences Meetings, with global outreach and online and onsite programming, will serve as a catalyst for convening thousands of the world's leading oceanographers and will continue to extend its reach through a growing global group of affiliated communities and partners. The Ocean Sciences Meeting, which has been held since 1984, proposes an in-kind contribution by providing a venue to promote connections between the Ocean Decade with oceanography community-scientists, NGOs, non-profit organizations, and the private sector. Additionally, the coalition of partners will bring more attention to the UN Decade outside of this biennial meeting. The conference scientific program committee for each meeting, which includes representatives from all three societies, would discuss how to prioritize the Decade at each conference between 2022-2030 and consider what partners or what focus would enhance collaboration and knowledge-sharing on sustainable oceans with a focus on the ocean we want for the future. Ocean Sciences Meetings will provide the opportunity to convene sessions on specific applications and priority areas of sustainable development throughout the decade. Participants also include representatives from NGOs, government agencies worldwide, other non-profit agencies, and private-sector organizations in the ocean sciences. Solution projects and outcomes, white papers, scientific journal articles, or other collateral are likely outcomes from each meeting and will expand the reach and timeline of the in-kind contribution. In addition, the coalition of sponsoring societies (AGU, ASLO, TOS) brings the ability to have a continuum of UN Decade work and focus beyond OSM through ASLO's annual Aquatic Science Meeting, TOS's meetings and communications channels, and AGU's 25,000-person annual meeting and other conferences. In addition, there are other potential synergies in areas of each association. The UN Decade would become a supporter of Ocean Sciences Meetings throughout the decade and given the opportunity to host town halls, workshops, and provide speakers or information about the UN Decade. The UN Decade logo could be used in all major OSM marketing. Additional goals of these events are to highlight the

Unique ID	Name of Contribution	Lead Partner	Summary
			ocean's importance to society and to support the Decade of Ocean science vision to "develop scientific knowledge, build infrastructure and foster relationships for a sustainable and healthy ocean." The OSM team is asking for an endorsement for the 2022, 2024, 2026, 2028, and 2030 meetings.
National Contributions			
27	The NASA Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission: Advanced satellite measurements of the sea and sky	NASA Goddard Space Flight Centre	The NASA Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission represents NASA's next great investment in satellite ocean colour, cloud, and aerosol data records to enable continued and advanced insight into oceanographic responses to Earth's changing climate. Scheduled for launch in 2023/2024, PACE's primary instrument is a global spectrometer that will enable improved understanding of aquatic ecosystems, as well as provide new information on phytoplankton community composition and improved detection of algal blooms. PACE will also carry two multi-angle polarimeters, the advanced technology from which will offer new and unique insights into the composition of microscopic aquatic communities.
33	NASA Sea Level Change Science Team	NASA	Since 2014, the NASA Sea Level Change Science Team (N-SLCT) has been conducting interdisciplinary sea level science by collecting and analysing observational evidence of sea level change, quantifying underlying causes and driving mechanisms, producing projections of future changes in sea level, and communicating NASA's latest discoveries to the public through the Sea Level Portal at https://sealevel.nasa.gov. N-SLCT has made progress many important problems in sea level science, resulting in a better understanding of ice sheet dynamics, ocean processes, the development of tools and assessments of mass loss impacts from ice sheets and glaciers on coastal cities, and improved representation of vertical land motion related to coastal subsidence, tectonics, and Earth's post-glacial rebound.
50	MPAs as sentinel sites for ocean conservation, science and literacy	US National Oceanic and Atmospheric Administration	Programs seeks to: 1) Understand climate impacts affecting the oceans 2) Promote research on MPA uses and socioeconomic benefits to coastal communities; 3) Develop initiatives to promote ocean literacy 4) Support national and international initiatives to establish networks of MPAs.
51	NOAA Coastal Aquaculture Siting and Sustainability Program	US National Oceanic and Atmospheric Administration	The NOAA Coastal Aquaculture Siting and Sustainability (CASS) Program provides high quality science, guidance, and technical support to coastal managers to grow sustainable aquaculture while maintaining and improving ecosystem health. Efforts through the CASS Program are providing needed information to regulatory, industry, and research stakeholders to make sound decisions about permitting, siting, and operating marine fish farms. Continued support of these efforts is guiding monitoring and further research toward ensuring that sustainable practices continue and in minimizing environmental effects. Discharge from marine farms and associated issues of siting such operations are among the most important environmental questions facing this industry.
116	A Transformative Decade for the Global Ocean Acidification Observing System	National Oceanic and Atmospheric Administration	Ocean acidification (OA) is the ongoing observed increase in seawater acidity (pH) primarily due to the ocean's uptake of anthropogenic atmospheric carbon dioxide (CO_2). The rate of the ocean's changing chemistry is measured by a suite of stations worldwide, and conditions expected by 2100 will have a number of negative effects on marine life. Many challenges to understanding OA and its impacts remain. A robust understanding of OA and its impacts requires interdisciplinary monitoring and research efforts, including carbonate chemistry, physical oceanography, biogeochemistry, ecology, biology, natural resource economics, and other social and hard sciences. It also requires a global workforce that is capable of analysing, assessing, and applying this data. This Decade Programme expands CO_2 observing systems by developing the next generation of sensors, training new experts, ensuring materials are available for accurate measurements, and filling in under-observed regions. It also builds capacity for publicly-available data that is fed into products useful for stakeholders.
121	Committee on Earth Observation Satellites - Coastal Observations, Applications, Services, and Tools (CEOS COAST)	National Oceanic and Atmospheric Administration (NOAA), National Environmental Satellite Data and Information Service (NESDIS), Centre for Satellite Applications and Research	COAST is a team within the Committee on Earth Observation Satellites focused on the coastal zone, especially the land-sea (~aquatic) interface. Working collaboratively with stakeholders to co-design and co-develop high priority products which resonate with major agencies and by leveraging CEOS-wide agency capabilities and capacities, CEOS COAST pilot projects are uniquely capable of using Earth Observation to provide a multidisciplinary approach to addressing the SDGs, disaster risk reduction and coastal resilience in response to climate change. Diverse societal issues are tackled by COAST under the pilot project themes across geographical regions ranging from continental shorelines to small-island nations.

Unique ID	Name of Contribution	Lead Partner	Summary
		(STAR)	
122	The World Ocean Database Programme (WODP): Openly discoverable, accessible, adaptable, and comprehensive digital global profile oceanographic data of known quality.	National Oceanic and Atmospheric Administration (NOAA)	Countries need access to oceanographic profile data of known quality to address current and emergent scientific and socio-economic issues at all spatial and temporal scales. The challenge is that data users cannot access the immense and growing globally distributed data that exists in diverse digital formats. The World Ocean Database (WOD) mitigates this challenge. WOD is the world largest unrestricted, uniformly formatted, quality controlled, digital ocean profile database available with data from 1778 to present. WOD acquires and receives ocean data worldwide for ocean Climate Essential Variables (EOV), plankton, and other variables including data from the World Data Service for Oceanography; part of the World Data System. WOD is hosted at NOAA and it is a project of the International Oceanographic Data Exchange (IODE) of the Intergovernmental Oceanographic Committee (IOC). WOD is a Centre for Marine Meteorology and Oceanographic Climate Data (CMOC) in the Marine Climate Data System; a joint system of IOC and the World Meteorological Organization (WMO). In partnership with IODE, NOAA proposes to develop and deploy a data ingestion tool at the IODE project office in Belgium together with Cloud services as a starting point. This effort builds on IODE's Ocean Data and Information System (ODIS) and will enable National Oceanographic Data Centers worldwide and other digital repositories to (i) upload their oceanographic data into WOD and (ii) retrieve data in an uniform interoperable format; a value-added proposition. The vision is to achieve openly discoverable, accessible, and adaptable digital profile oceanographic data of known quality.
124	Integrating Coastal Wetlands Data into Greenhouse Gas (GHG) Inventories for Developing Countries: A New International Blue Carbon Initiative	United States Department of State and United States National Oceanic and Atmospheric Administration	This project will utilize the expertise of the U.S. government to develop tools and templates that facilitate the preparation of GHG inventories consistent with IPCC guidelines, particularly the 2013 IPCC Wetlands Supplement, and will provide technical assistance to strategic developing countries to build capacity in this area. The increased accuracy of information in GHG inventories will promote better management strategies of wetlands that will lead to reduced GHG emissions and better protection of coastal ecosystems.
133	Promote Seabed 2030 and Ocean Mapping	US National Oceanic and Atmospheric Administration	The Decade Programme "Promote Seabed 2030 and Ocean Mapping' contributes to the development of a comprehensive digital representation of the ocean. Only 20 percent of the world's ocean is mapped to modern standards, and many parts of the ocean are not surveyed comprehensively with modern multibeam sonar. A full map of the ocean is a crucial starting point for the desired outcomes of the Decade, and failure to produce an adequate map prevents us from globally achieving the "ocean we want."
135	NSF Coastlines and People	U.S. National Science Foundation	The NSF Coastlines and People (CoPe) program supports diverse, innovative, multi-institution Coastal Research Hubs that are focused on critically important coastlines and people research that is integrated with broadening participation goals. The hubs are structured using a convergent science approach, at the nexus between coastal sustainability, human dimensions, and coastal processes to transform understanding of interactions among natural, human-built, and social systems in coastal, populated environments. CoPe supports Focused Hubs, projects $1 million or less per year for 3 to 5 years, as well as Large-scale Hubs, projects of $2-4 million per year, for up to 5 years.
140	International Ocean Discovery Program	U.S. National Science Foundation	The International Ocean Discovery Program (IODP) is an international marine research collaboration that explores Earth's history and dynamics using ocean-going research platforms to recover data recorded in seafloor sediments and rocks and to monitor subseafloor environments. IODP depends on facilities funded by three platform providers with financial contributions from five additional partner agencies. These entities represent twenty-three nations whose scientists are selected to staff IODP expeditions conducted throughout the world's oceans. IODP expeditions are developed from hypothesis-driven science proposals. The program's science plan identifies 14 challenge questions in the four areas of climate change, deep life, planetary dynamics, and geohazards.
142	Global Ocean Biogeochemistry Array (GO-BGC Array)	U.S. National Science Foundation	The Global Ocean Biogeochemistry Array (GO-BGC Array) creates a global fleet of robotic floats, transforming how we observe the ocean. The program will release a network of 500 robotic floats into the global ocean to collect chemistry and biology data from the surface to more than 1 mile deep. This program drives a shift in our ability to observe and predict, at the global scale, the effects of climate change on ocean metabolism, carbon uptake, and living marine resource management. Collected data will be freely accessible in near real-time. The program includes an outreach program to diversify the blue workforce.
146	GEOTRACES	U.S. National Science Foundation	GEOTRACES is an international program designed to coordinate efforts and data regarding marine biogeochemical cycles of trace elements and their isotopes (TEIs). The guiding mission is to identify processes and quantify changes that control the distributions of key trace elements and

Unique ID	Name of Contribution	Lead Partner	Summary
			isotopes in the ocean, and to establish the sensitivity of these distributions to changing environmental conditions. TEIs play important roles in the ocean as nutrients, as tracers of processes now and in the past, and as contaminants. Their biogeochemical cycling has direct implications for such diverse areas as the carbon cycle, climate change, ocean ecosystems, and environmental pollution.
153	Navigating the New Arctic	U.S. National Science Foundation	Navigating the New Arctic (NNA) is one of NSF's 10 "Big Ideas:" long-term research and process areas for future investment to advance the cutting edge of global science and engineering by bringing together diverse disciplinary perspectives to support convergence research. NNA embodies an important forward-looking response to rapid and wide-scale Arctic changes. NNA seeks innovations in fundamental convergence research across the social, natural, environmental, computing and information sciences, and engineering that address the interactions or connections among natural and built environments and social systems, and how these connections inform our understanding of Arctic change and its local and global effects.
204	Multinational Image Classification Assessing Coastal Habitats	National Oceanographic and Atmospheric Administration, Southeast Fisheries Science Centre	Harnessing artificial intelligence to provide a rapid, reproducible habitat classification toolbox to assess impacts of change on coastal habitats from available imagery.
35	IT-NAVY HIGH NORTH PROGRAM	ITALIAN NAVY Italian Hydrographic Institute	The Italian Navy - acting as national marine focal point for Arctic research - launched in 2017, the Pluriannual Joint Research Program in the Arctic, named HIGH NORTH and this is the proposed Decade Program. A new three years activity is in progress with an enhanced overview having a look to the 3D mapping from satellite to seabed. The HIGH NORTH Program, has three fundamental pillars represented by the 3 E: Exploration, Environment and Education, supported by the 3 C: Collaboration, Coordination and Cooperation.
65	Establishing Turkey's Marine Environment Strategy	Ministry of Environment and Urbanization	Establishing Turkey's Marine Environment Strategy Project has started in 2018. The project aims to develop understanding of EU Directive 56/2008 Marine Strategy Framework Directive (MSFD) and adopt its technical aspects. Employing the 6-year cycle of MSFD, Turkey will produce a national marine strategy that handles 11 Descriptors of MSFD.
86	Values of the Ocean - a 10 area Decade Programme for protection and sustainable use of the ocean	The Research Council of Norway's Ocean Secretariat	The goal of Values of the Ocean is to support research and innovation central for achieving the Ocean Decade's goals on ten areas: 1 Climate and environment interactions, 2 Holistic ocean governance, 3 Healthy and safe seafood for all, 4 Renewable energy from the ocean, 5 Environmentally friendly maritime transport, 6 An ocean of data, 7 Who owns the ocean?, 8 Keeping the Arctic in one piece, 9 Global ocean economy and development aid, and 10 Everyone understands the ocean. Researchers, industry actors and public sector will be involved and cooperation between research disciplines, sectors and countries central.
166	France's Priority Research Program "Ocean of solutions"	IFREMER - Institut français de recherche pour l'exploitation de la mer CNRS - Centre national de la recherche scientifique	The PPR Ocean of solutions aims at addressing ocean-related societal challenges through integrated research. 5 thematic challenges have been identified: anticipation and adaptation to extreme events in oversea territories; prediction of climate-driven changes in polar oceans; protecting ocean biodiversity; sustainable management of marine physical and biological resources; characterization of ocean exposome due to pollutions. 2 transversal challenges will also be addressed: coupling of ocean observation and modelling; increasing ocean literacy. The PPR Ocean of solutions has been announced by the French President in December 2019 as a major contribution of France to the UN Ocean Decade. Although funding is available to French research teams only, this ambitious program also aims at fostering international collaborations on identified challenges.
In-Kind Resources			
59	The Ocean Decade Image Bank and Toolkits	The Ocean Agency	A free-to-use digital library of thousands of ocean photos and videos by world-class photographers and videographers, together with infographics, designs, and other media assets including easy-to-use communication toolkits. These free resources will be designed to help everyone involved in ocean science and conservation communication and education to: • accelerate awareness and support for ocean science and conservation by developing more compelling communications and increased media coverage • raise awareness of the importance of the Ocean Decade and the issue of Ocean Change, and • improve the overall image of ocean science to create excitement around the subject, broaden its appeal and increase support through prioritisation.
250	Piping Hot x UN Decade of Ocean	Piping Hot Australia	Piping Hot Australia is a surf wear brand that designs and produces a full range of fashion, footwear and accessories for families. Our products are available through selected retailers and e-commerce sites. Focusing on transparency, circularity, and recycled materials, Piping Hot is a

Unique ID	Name of Contribution	Lead Partner	Summary
	Science for Sustainable Development		signatory to the UN Global Compact, with a particular focus on ocean protection. We propose creating a fashion collaboration featuring Ocean Decade communications to promote ocean literacy and a more sustainable ocean. We will work with ocean scientists and ocean decade stakeholders to determine relevant messages that will be developed into graphics and text for swing tags that are attached to garments and graphics that can be incorporated onto/into clothing that are promoted in line with shared ocean decade objectives. Through fashion, we can access a diverse audience and by directing messaging via products increase their awareness and understanding of the ocean and its value to society. By partnering with the Decade, we can amplify key initiative messages and encourage consumers to adjust their behaviours to better value, conserve and sustainably support the ocean. Our customer base is connected to the ocean and has shown a willingness to take action to protect it. We have distribution in multiple countries including Australia, Japan and China and so therefore have the potential to be wide-reaching in our messaging. The Ocean Decade will benefit from visibility in retail environments, on social media and through PR exposure. We propose working in partnership with the UN Decade Secretariat, CSIRO and other Australian Decade partners to align with key dates and campaigns. In this regard, we have already participated in the first UN Decade stakeholder briefing held in Australia and have begun a partnering conversation with Australian stakeholders involved in the UN Decade.

ANNEX 3: REGISTERED UN-LED DECADE ACTIONS

Unique ID	Name of Programme	Lead Partner	Summary
UN1	Ocean Observing Co-Design - Evolving ocean observing for a sustainable future	The Global Ocean Observing System (GOOS) through lead sponsor IOC/UNESCO	This Programme will transform the ocean observing system through increased integration and innovation, creating a system co-designed with observing, modelling, and user stakeholders. This fit-for-purpose system will more effectively serve the expanding range of multidisciplinary societal needs and build essential infrastructure to demonstrate the ongoing societal value of the system.
UN2	Observing Together: Meeting Stakeholder Needs and Making Every Observation Count	The Global Ocean Observing System (GOOS) through lead sponsor IOC/UNESCO	We aim to transform ocean data access and availability by connecting ocean observers and the communities they serve, through enhanced support to both new and existing community-scale projects. Globally, many communities are unable to access ocean data in decision-ready formats and so cannot see the value of investment in ocean observations. Co-design will broaden equitable access to and relevant application of ocean knowledge by a myriad of stakeholders. We will leverage the Global Ocean Observing System's network of expertise to bring needed observations and forecasts to community users and into global data streams, making every observation count.
UN4	Digital innovation Hand-in-Hand with fisheries and ecosystems scientific monitoring	FAO of the UN, FI Division	The Fisheries and Environmental Atlas will use Open Data and Open Science to support fisheries and ecosystems scientific monitoring. The Atlas will include information from FAO fisheries country profiles (http://www.fao.org/fishery/countryprofiles/search/en), dynamic fishing activity maps from vessel transmitted data, and estimates of fishing activity from global assessments of satellite radar and optical imagery. It will include topical environmental maps and data for FAIR analysis. The Atlas will work hand-in-hand with countries and Regional Fishery Bodies (RFBs) to disseminate comprehensive Open Data pages on the state, impacts, and management of fisheries, which can enable countries progress towards SDGs and UN Decade targets
UN5	Ocean Practices for the Decade	International Oceanographic Data and Information Exchange (IODE) & GOOS	Humanity's connection to the ocean is based on how we act and react to its multifaceted wonder. Our "ocean practices" are an essential bridge between humanity's cultural and natural heritage. The Ocean Practices for the Decade Programme ("OceanPractices") will support all ocean stakeholders in securing, equitably sharing, and collectively advancing this methodological heritage. By engaging diverse communities of practice and interlinking them through FAIR digital technologies, OceanPractices will transform how science and other stakeholders align their interests/capacities, creating ever-better practices, promoting sustainable human and ocean well-being. These practices improve interoperability and facilitate training so broader global participation naturally evolves.
UN6	The EAF-Nansen Programme - Supporting the Application of the Ecosystem Approach to Fisheries (EAF) management, considering climate and pollution impacts	Food and Agricultural Organisation of the United Nations (FAO)	The overriding objective of the EAF Nansen Programme is to improve food and nutrition security in partner countries by promoting the ecosystem approach to fisheries. The programme consists of three key components: (i) improving the scientific knowledge base, (ii) supporting sustainable fisheries policies and management, and (iii) providing capacity development. The EAF-Nansen Programme is a partnership among Norad, the Institute of Marine Research (IMR) and FAO, and thirty-two countries in Africa and the Bay of Bengal. The programme uses the R/V Dr Fridtjof Nansen to carry out at-sea research. The vessel is owned by Norad and operated by IMR, with scientists from partner countries taking part in cruises. The vessel flies the UN flag as part of the agreement with FAO.
UN7	Ocean Literacy With All (OLWA): the change we need for the ocean we want	Intergovernmental Oceanographic Commission of UNESCO	OLWA advances Ocean Literacy (OL) through international partnerships and networks by designing and implementing transformative locally and globally relevant research-based activities and projects by and for diverse stakeholders. This programme builds capacity and behaviour change to achieve an ocean literate society to help ensure sustainable development of the global ocean.

Intergovernmental Oceanographic Commission (IOC)
United Nations Educational, Scientific and Cultural Organization
7 Place de Fontenoy
75 732 Paris Cedex 07, France
Tel.: +33 1 45 68 10 10
http://ioc.unesco.org