

**Regular Process for Global Reporting and Assessment
of the State of the Marine Environment, including
Socioeconomic Aspects (Regular Process)**

**Paris, France
12-13 December 2023**



**Office of Legal Affairs
Division for Ocean
Affairs and the
Law of the Sea**



unesco
Intergovernmental
Oceanographic
Commission



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development



**WORLD OCEAN
ASSESSMENT**

International Symposium on Strengthening the Ocean Science- Policy Interface



Summary of discussions

International Symposium on Strengthening the Ocean Science-Policy Interface

Summary of discussions

Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects

Paris, France, 12-13 December 2023

I. Overview

The present document provides a summary of discussions of the International Symposium held in Paris, France, from 12 to 13 December 2023. The Symposium was implemented as an element of the third cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (Regular Process) and organized by the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations (DOALOS) in collaboration with the Intergovernmental Oceanographic Commission of United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO). The Symposium covered the following oceanic regions of the Regular Process: the North Pacific; the South Pacific, the Indian Ocean (including the Arabian Sea and the Bay of Bengal); the Red Sea and the Gulf of Aden, and the Regional Organization for the Protection of the Marine Environment (ROPME)/Regional Commission for Fisheries (RECOFI) area; the North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea; and the South Atlantic (between the African and American coasts) and the wider Caribbean.

Capacity-building is an integral part of the Regular Process where the role of the science-policy interface is recognized to be of pivotal importance to ensure that governance is informed by the best available science. To further advance the strengthening of the science-policy interface to support integrated action for the conservation and sustainable use of the oceans and marine resources, the Symposium focused on the following elements:

- a) Overview of global ocean governance and importance of the science-policy interface with theories and practice;
- b) Background on the Regular Process/World Ocean Assessment and presentation on the process of nomination to the Pool of Experts and opportunities for contributing to the third World Ocean Assessment;
- c) Regional deep dive on capacity-building needs (including in the science-policy interface) and lessons learned in:
 - i. North Pacific;
 - ii. South Pacific;
 - iii. Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and the Gulf of Aden, and the ROPME/RECOFI area;
 - iv. North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea; and
 - v. South Atlantic (between the African and American coasts) and the wider Caribbean

- d) Importance of science communication and Ocean Literacy as a key element of the science-policy interface; and
- e) Ocean Decade: support of the World Ocean Assessments (WOAs) on the Ocean Decade's mission to generate and use knowledge for the transformational action needed to achieve a healthy, safe and resilient ocean for sustainable development by 2030 and beyond.

The annexes to the present summary of discussions include the programme (Annex I), consolidated key ideas (Annex II), list of participants (Annex III), post-Symposium survey analysis (Annex IV), and speakers booklet (Annex V).

II. Background

An inclusive, strong and effective ocean science-policy interface ensures that scientific research meets the needs of policymaking, while maintaining its independence. In recognition of this, the thirteenth meeting of the Ad Hoc Working Group of the Whole on the Regular Process endorsed as part of the Programme of work for the period 2021–2025 for the third cycle of the Regular Process, a two-day International Symposium on strengthening the ocean science-policy interface to be held in 2023.¹

The Symposium was structured so as to facilitate interaction and knowledge-sharing. It drew upon the outcomes of the Regular Process regional workshops, and was designed to help identify future needs and directions for further capacity-building capacity on the science-policy interface. The Symposium was attended by representatives from the scientific and policy communities, at all levels. This included representatives from States and intergovernmental organizations, with expertise in the ocean science-policy interface, as well as relevant non-governmental organizations and other stakeholders.

The Symposium provided a forum to share lessons learned on the strengthening of the science-policy interface for ocean governance at the global level, on the empowerment of the ocean data value chain, the links between the science-policy interface and society, including ocean users, the role of citizen science and traditional, indigenous and local knowledge, as well as to identify common approaches, priorities and potential avenues for collaboration.

The Symposium offered a unique opportunity for sharing information between scientific platforms operating at all levels, thereby fostering a common understanding of approaches and priorities, with the aim of reducing the duplication of efforts and providing opportunities to reinforce collaboration. The proceedings of the Symposium and the slides submitted by panellists on their presentations have been made available on the Regular Process website.²

III. Conduct of the Symposium

The Symposium was held under the auspices of the United Nations, represented by DOALOS, which also serves as the secretariat for the Regular Process, in collaboration

¹ See A/75/362, paragraph 27.

² See <https://www.un.org/regularprocess/Symposium>

with IOC-UNESCO. The [biographies](#) of all speakers can be found on the Symposium's [webpage](#),³ and the Speakers Booklet is annexed to the present report (Annex V).

The Regular Process was represented by members of the Group of Experts (Ms. Karen Evans, Ms. Maria João Bebianno, Mr. Roberto De Pinho, Mr. Rafael Gonzalez-Quiros, and Mr. Yutaka Michida) and DOALOS as the secretariat of the Regular Process (Mr. Marco Boccia and Ms. Jisun Hwang), in addition to the DOALOS Capacity-Building and Trust Funds Unit (Mr. Francois Bailet and Ms. Rachel Lucas).

The Symposium was opened with keynote addresses by Mr. Vladimir Ryabinin, Ms. Kimberly Louis, and Mr. Francois Bailet. Following the opening segment, Mr. Francois Bailet and Mr. Julian Barbière moderated a session on ocean governance and capacity-building. Speakers for this session were Mr. Peter Mosby Haugan, Ms. Kirsten Isensee, Mr. Francisco Armando Arias Isaza, Ms. Immaculate Sware Semesi, and Ms. Johanna Diwa-Acallar. This was followed by a presentation from Mr. Marco Boccia, which provided an overview of the Regular Process and outlined key elements to be contained in WOA III.

The Symposium then shifted to regional deep dive segments for the five oceanic regions of the Regular Process. The North Pacific segment was Co-Chaired by Ms. Maria João Bebianno and Ms. Kirsten Isensee. Speakers for this segment were Mr. Wenhai Lu, Mr. Yutaka Michida, Ms. Christine Gaebel, and Ms. Siara Jeanne Facon Nulada.

The South Pacific segment was Co-Chaired by Ms. Karen Evans and Ms. Alison Clausen. Speakers for this segment were Ms. Juana Susana Jimenez Alcantara, Mr. Ian Butler, and Mr. Sebastian Herrera Kasic.

The Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and the Gulf of Aden, and the ROPME/RECOFI area segment was Co-Chaired by Mr. Rafael Gonzalez-Quiros and Mr. Justin Ahanhanzo. Speakers for this segment were Ms. Francesca Adrienne, Ms. Razieh Gahouomi, and Mr. Mohammad Muslem Uddin.

The North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea segment was Co-Chaired by Ms. Maria João Bebianno and Ms. Francesca Santoro. Speakers for this segment were Ms. Iryna Makarenko, Ms. Anne Marie Cooper, Mr. Paul Snelgrove, and Ms. Christina Deligianni.

The South Atlantic (between the African and American coasts) and the wider Caribbean segment was Co-Chaired by Mr. Roberto Dantas de Pinho and Mr. Peter Pissierssens. Speakers for this segment were Mr. Ariel Hernan Troisi, Mr. Alexander Turra, and Ms. Tricia Allison Lovell.

These segments highlighted the varying degrees of challenges and opportunities for sustainable use of the ocean, as well as capacity-building needs and priorities to ensure strengthened science-policy interface.

The regional deep dives were followed by two segments, one underscoring the significance of ocean literacy and the other on the Ocean Decade Framework which highlighted its role in fostering collaboration among various stakeholders. The ocean

³ Ibid.

literacy segment was Chaired by Ms. Francesca Santoro who also delivered an intervention as a speaker. Speakers for this segment were Mr. François Bailet, Mr. Rodrigo Thomé, Mr. Ronaldo Christofolletti, and Ms. Natasha Berg.

The Ocean Decade segment was Co-Chaired by Ms. Karen Evans and Mr. Julian Barbieri. Speakers for this segment were Mr. Stephen Widdicombe, Mr. Jean Aude, Mr. François Marcel Auguste Houllier, Ms. Lorna Veronica Inniss, and Mr. Zaki Mubarak.

Closing remarks were made by Mr. Vladimir Ryabinin, Ms. Kimberly Louis, Mr. Francois Bailet, and Mr. Marco Boccia.

Ms. Jisun Hwang and Ms. Rachel Lucas served as rapporteurs for the Symposium.

One side event and one special event were convened on the margins of the Symposium during lunch breaks. The side event held on 12 December was Co-Chaired by Ms. Francesca Santoro and Mr. François Bailet. Speakers for this event were Ms. Natasha Berg, Mr. Rodrigo Thomé, Mr. Lucas Bravo, and Ms. Camille Étienne. This side event, entitled “UN World Ocean Assessment: Getting Society to understand (& care about) the state of the ocean,” emphasized the significance of enhancing ocean literacy and communication strategies to raise awareness on the WOA and its findings among policymakers and the public. In addition, this event explored ways to improve the dissemination of the latest developments in ocean science and the state of the ocean, and the role of the WOAs as a tool for enabling science-based decision-making.

The special event held on 13 December was moderated by Ms. Alison Clausen. Speakers for this segment were Mr. Vladimir Ryabinin, Mr. Gert Verret, Ms. Mary-Frances Davidson, Mr. Francois Bailet, and Mr. Julian Barbieri. This special event, entitled “Launch of the Ocean Decade Capacity Development Facility,” was dedicated to the launch of the new Ocean Decade Capacity Development Facility which aims to provide demand-driven capacity-building support to present and prospective Ocean Decade collaborators, addressing science capacity-building, combined with co-designing of the science-policy interface, focused on Least Developed Countries (LDCs), Small Island Developing States (SIDS), and early career ocean professionals.

The Symposium was attended by more than 200 participants from 63 States and 44 organizations, including: Algeria, Antigua and Barbuda, Argentina, Australia, Bangladesh, Barbados, Belgium, Benin, Brazil, Cambodia, Cameroon, Canada, Chile, China, Croatia, Cyprus, Côte d’Ivoire, Democratic Republic of the Congo, Denmark, Equatorial Guinea, France, Germany, Ghana, Greece, Grenada, Guatemala, Guinea-Bissau, Iceland, India, Indonesia, Iran, Ireland, Italy, Japan, Lebanon, Malaysia, Malta, Mauritius, Mexico, Montenegro, Netherlands, Nigeria, Oman, Peru, Philippines, Portugal, Republic of Korea, Senegal, Seychelles, Slovenia, South Africa, Spain, Sweden, Switzerland, Republic of the Gambia, Togo, Tunisia, Türkiye, Ukraine, United Kingdom, United Republic of Tanzania, United States, Vietnam, Yemen; and Académie de marine (French Maritime Academy), Atlantic International Research Centre (AIR Centre), Baltic Sea Region Spatial Planning Initiative VASAB, Centro Universitario SENAI-CIMATEC & Federal University of Bahia, CNRS (French National Center for Scientific Research), Efarco, EMBRC-ERIC, European Marine Board, First Institute of Oceanography, GEOMAR Helmholtz Center for Ocean Research Kiel, Greenbelt Economic Development Ghana, Grenoble Alpes University, Helmholtz-Zentrum Hereon, IFREMER (French national research institute for ocean science and technology), Institute

of Oceanology Polish Academy of Sciences, Instituto Español de Oceanografía (IEO-CSIC), International Coral Reef Initiative (ICRI), La Rochelle Université UMR CNRS 7266 LIENSs, Leibniz Centre for Tropical Marine Research (ZMT), MedPAN, Memorial University, NIVA Inc., Norwegian Institute of Marine Research, Ocean & Climate Platform, Oceanographic Institute, University of São Paulo, Oswaldo Cruz Foundation (Fiocruz), Research Institute for Sustainability (RIFS) / TMG Think Tank for Sustainability, Sciences Po Bordeaux, Tara Ocean Foundation, Texas A&M University, UNOPS, US National Oceanic and Atmospheric Administration, University Iuav of Venice - Corila, University of Bergen, University of Brest, University of East Anglia, University of Galway, University of Plymouth, University of South Africa, University of Southampton, Université Paris 1 Panthéon Sorbonne, Université de Bretagne Occidentale, WMU-Sasakawa Global Ocean Institute, Wimafrica RDC.

IV. Summary of presentations and discussions

1. Opening segment

Mr. Vladimir Ryabinin delivered opening remarks, welcoming participants to the Symposium. Mr. Ryabinin highlighted the importance of integrated approaches to sustainably manage the ocean, guided by Sustainable Development Goal 14 and other intergovernmental processes on biodiversity, plastics, and climate change within the UN Decade of Ocean Science framework. He emphasized the longstanding collaboration between DOALOS, the Regular Process and IOC-UNESCO, aiming to create synergies in knowledge sharing and enhance the complementarity of assessments to address various ocean stressors. This collaboration aims to ensure excellence in ocean research, underpinned by capacity-building in data collection and management. He expressed hope for a fruitful exchange of views during the Symposium, and stressed the need to strengthen the partnership between the IOC-UNESCO and DOALOS towards a sustainable ocean for all.

Ms. Kimberly Louis underscored the importance of science-based decision-making. She advocated for a stronger relationship between policymakers and scientists for the sustainable management of the ocean and emphasized the critical role of the Regular Process in strengthening the science-policy interface at the global level. She called for synergy among complementary assessments to advance the best available ocean science that leaves no one behind.

Mr. Francois Bailet opened his remarks by expressing gratitude to IOC-UNESCO for hosting the Symposium. He noted the longstanding collaboration between DOALOS and IOC-UNESCO, benefiting humanity and the sustainable use of the ocean. He highlighted the leadership of Ms. Louis as the Co-Chair of the Ad Hoc Working Group of the Whole on the Regular Process and thanked the Group of Experts of the Regular Process who will guide discussions at the Symposium. He reiterated the importance of synergy and the science-policy interface across various ocean-related intergovernmental processes, including biodiversity and climate change.

2. Overview of session on global ocean governance and importance of science-policy interface with theories and practice

The session was jointly led by Mr. Francois Bailet and Mr. Julian Barbière as Co-Moderators. Mr. Barbière opened the segment, introducing the importance of assessing

the current global framework for ocean governance and capacity-building. He highlighted the need for providing strong capacity-building activities to ensure the development of the blue economy, through public awareness and the science-policy interface. He drew attention to the importance of interrogating how best to achieve a strong science-policy interface at the time of new communication channels, such as social media. He also insisted on the need for providing a strong scientific foundation for decision making.

Mr. Peter Mosby Haugan took the floor to provide his views on moving towards strengthening the scientific basis for ocean related decision-making. He shared key points on matching demand and supply and on the importance of data, and highlighted how policymakers' priorities and needs on various aspects of the ocean, for example on fish stocks assessment, drive the development of the relevant science. In order to strengthen the interface between science and policy, he emphasized the need to find solutions by collaborating with the relevant experts and adopting a multidisciplinary approach that takes into account equity, finance, and social sciences perspectives. From his point of view, further interactions between these various actors need to be encouraged so that they can disseminate their knowledge broadly. In this regard, he mentioned enhancing ocean literacy as an appropriate way of stimulating the demand for ocean science.

Ms. Kirsten Isensee shared the latest initiatives of IOC-UNESCO for the co-production of knowledge in support of the sustainable management of the ocean. She identified current gaps in reporting on ocean health indicators and the importance of pursuing further efforts to ensure balanced geographic representation in reporting, collection of data, and capacity-building for managing and analyzing data. She highlighted how the production of ocean scientific knowledge is at the heart of the IOC-UNESCO mandate, including transfer of ocean technology. She stressed the importance of the need for addressing disparities in ocean research investment budgets by governments. In this regard, she called for the further strengthening of multi-stakeholder partnerships, and the exploitation of the scientific findings presented by the WOAs and the Global Ocean Science Reports.

Mr. Francisco Armando Arias Isaza made an intervention on the Ocean Teacher Global Academy (OTGA), an initiative which delivers ocean capacity-building and serves as an example of collaborative approaches to provide solutions based on science to enhance understanding of the ocean. He underscored the importance of providing training to respond to knowledge and data needs for the management of the oceans, and to manage the Ocean Decade Challenges. In the framework of OTGA, region-specific trainings for ocean experts and professionals have been delivered in Spanish and Portuguese and more than half of participants were women. He underscored that the ultimate aim of these 53 courses, covering 18 subjects and featuring all the rigorous qualities typical of academic programmes, was to ensure the quality of capacity-building for ocean scientists.

Ms. Immaculate Sware Semesi delivered an intervention on regional capacity-building needs. She highlighted the lack of funding to support quality research, the lack of data and its gaps to ensure the establishment of baselines. She also underscored current challenges in the barrier of communicating scientific information to policymakers and the general public. She therefore proposed that it is necessary to strengthen regional cooperation, increase public involvement, and harness technology and innovation for better data analysis. In addition, she identified as a challenge the diversity of actors and

entities involved, and noted the management of this complexity as a regional capacity need. She proposed that the use of best practices and lessons learned could provide possible solutions to the problems, including to clarify the level of stakeholder commitment, identify cooperation mechanisms and new initiatives. Ms. Semesi concluded by insisting on the fact that we should rely on the people who know how to link science and policy to facilitate interaction between these two fields.

Ms. Johanna Diwa-Acallar's intervention focused on the Capacity Development Strategy of IOC-UNESCO. She presented the main features of the Strategy and specified that the activities and actions undertaken by IOC-UNESCO should result in desired changes in terms of decision-making, governance, and knowledge at national and sub-regional levels. She further listed the six outputs of the Strategy, stressing that they do not focus solely on training and that they are broader including, for example, to establish or improve access to physical infrastructure already in existence; to strengthen global, regional and sub-regional mechanisms; and to increase visibility and awareness. At the implementation level, she explained that the identification of the priority capacity and information needs is undertaken through the work of the IOC-UNESCO Sub-Commissions. To this end, several tools are used, such as ocean capacity development hubs (gathering different stakeholders), OTGA (presented by Mr. Francisco Armando Arias Isaza), and e-learning platforms.

The panel presentations were followed by an interactive segment which included all Symposium participants. One participant highlighted that there is a lack of information related to ocean acidification, and this led to an exchange of views among the panellists and participants on how to develop more local technologies in order to further investigate ocean acidification and related issues. The need to focus more on the regulatory dimension of public action was also stressed by a participant. In this regard, the participant noted that to strengthen the interface between science and policy, for example in the fisheries sector, there is a need for an institutionalized interaction and this interaction requires public regulation.

3. Background on Regular Process/World Ocean Assessment and presentation on nominating to the Pool of Experts and opportunities for contributing to the third World Ocean Assessment

Mr. Marco Boccia delivered a presentation on the Regular Process and WOA III, followed by outlining the procedure for nominating experts to the Pool of Experts through self-nomination, recommendations by Member States, and Intergovernmental Organizations. He detailed the structure of the Regular Process, which includes all United Nations Member States, the Bureau, the Groups of Experts, the Pool of Experts, the National and Intergovernmental Focal Points, and the secretariat managed by DOALOS.

He emphasized the significance of conducting an integrated assessment of the oceans. This integrated approach is being applied in the preparation of WOA III, which will be organized around three cross-cutting themes: gender, equity, and Indigenous, Traditional owner and Local community Knowledge (ITLK). These themes are incorporated under two key sections: sustainability pathways, and the concept of one health. Each section respectively addresses the integration of these cross-cutting themes to provide a comprehensive understanding of ocean health and management.

The presentation also provided detailed information on the assessment process, and the engagement with experts, with a view to establishing communities of practice as part of the capacity-building programme of the third cycle of the Regular Process. He reiterated the value of contributions from the Pool of Experts, whose members, if selected, will form the writing teams for WOA III or serve as peer reviewers for the various chapters. It was noted that the current deadline for nominations is 31 January 2024, and that a larger pool would help ensure the necessary expertise to conduct an integrated assessment of the ocean, including on socio-economic aspects.

4. Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 1: the North Pacific⁴

Serving as session Co-Chair, Ms. Maria João Bebianno introduced her Co-Chair, Ms. Kirsten Insensee, and asked each panellist to briefly introduce themselves and their areas of specialization.

Mr. Wenhai Lu presented initiatives that have been undertaken in China in relation with the protection of marine ecosystems, such as the creation of marine protected areas or the hosting of the World Coastal Forum. Through these examples, he stressed that data collection is one of the important challenges in the region for the efficiency of the science-policy interface, and that more work is needed both to collect and share the data. More broadly, he stated that scientists and policymakers should continue to work towards the protection and promotion of marine ecosystems.

Mr. Yutaka Michida outlined the activities of IOC-UNESCO in the region, including the IOC-Tsunami Program, and Marine Spatial Planning related activities. He also highlighted data sharing as one of the key challenges regarding the science-policy interface, and recalled that marine spatial planning needs data to be shared and that it can contribute to improving such sharing in the region. Mr. Michida noted that ensuring inclusiveness in the science-policy interface remains a significant issue, in particular with respect to the engagement of local and indigenous communities. For example, learning more about the knowledge and tradition of the fisheries communities would benefit all. In this regard, he proposed that citizen-science should be further promoted.

Ms. Christine Gaebel introduced herself as specifically focused on the deep-sea science-policy interface and explained that this topic has unique implications and challenges, in particular in the Pacific Ocean. She highlighted that the Pacific Ocean is the largest ocean and also contains some of the deepest areas of the planet's oceans. She also stressed the particular challenges of areas beyond national jurisdiction, and explained that some tools encompassed in the newly adopted BBNJ Agreement, such as area based management tools, could be used in the region. She observed that, despite the disparities in the North Pacific, the region possesses significant capacities and that it is important to better connect science and policy to engage competent stakeholders and empower different stakeholders. Regarding the question of inclusiveness, Ms. Gaebel highlighted the need to clearly define what we understand under this term and what it encompasses. Among others, she listed three areas: gender, diversity of career status, and different forms of knowledge.

⁴ Please see Annex II for a summary of key areas identified during the panel discussion.

Ms. Siara Jeanne Facon Nulada specified that one of the main challenges in the region is having a clearly defined capacity-building structure. Thus far, most of the capacity-building activities have been linked with academia and she indicated that the participants may wish to share their experience in that regard. She stressed the importance of encouraging broad participation, including from women and coastal communities.

Following the segment presentations, the Co-Chairs opened the floor for an interactive session with all participants. In response to the question as to what WOA III and the Ocean Decade could bring to strengthening of the science-policy interface, panellists noted that WOA III could function as a holistic framework which can help the public better understand some of the major issues the ocean is facing. It was noted that as the Regular Process is a United Nations intergovernmental process, its work, including the outputs such as the WOAs have a high degree of credibility and recognition, and reach a wide audience. They also highlighted the importance of writing some parts of the next WOA in a concise form to reach a wider audience. As for the Ocean Decade, due to its broad scope, it is something of a call to action, including through sharing success stories. Finally, both processes can help to drive transformative changes. For example, the role played by the WOAs in the BBNJ process was discussed and it was stressed that the WOAs helped demonstrate the need and urgency of moving forward with the negotiation and adoption of such an agreement. Both the WOAs and the Ocean Decade also have the capacity to bring people from all around the world together and provide a forum where different types of knowledge are brought together and shared. The present Symposium was raised as an excellent illustration of this potential.

A question was posed regarding the role of the science-policy interface in fisheries governance, more specifically in Regional Fisheries Management Organizations, which are organizations dealing with fish stocks that have huge distribution and located nearly all over the world. Another participant queried on what political decision-makers concretely expect from a document, namely that it should be concise and that it should propose solutions that could be put in place. Regarding the length of the document, Ms. Bebianno noted that WOA III will not be an overly lengthy document, that it will contain a summary, and that the Group of Experts and the secretariat of the Regular Process are considering ways in which to publish WOA III electronically online. In response to a further question from the participants on the use of Artificial Intelligence (AI) for assessments, she added that this topic emerged in several discussions held at the Regular Process regional workshops in support of the development of WOA III. These discussions explored the potential that AI holds for cost-effective technological advancements in WOA III topical areas, such as renewable energy, environmental impact monitoring, marine spatial planning, genetic resource utilization, biotechnology, mineral resources, desalination, coastal development, medium to large-scale fishing, and geoengineering for sustainable ocean management.

5. Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 2: the South Pacific⁵

Serving as session Co-Chair, Ms. Alison Clausen opened the segment introducing her Co-Chair, Ms. Karen Evans, and the panellists who briefly introduced themselves and outlined their areas of specialization.

⁵ Please see Annex II for a summary of key areas identified during the panel discussion.

Ms. Juana Susana Jimenez Alcantara emphasized the necessity of forming an alliance for the sustainable management of ocean ecosystems, treating it as a shared responsibility and common challenge through international partnerships. This approach promotes the sharing of lessons learned among stakeholders to establish common priorities. She used the example of a sea-level monitoring facility to highlight that policy aims not only at sea-level rise prevention but also at building resilience in the affected coastal communities. In doing so, the principle of leaving no one behind is at the heart of this policy mechanism. The Ocean Teacher Global Academy (OTGA) was cited as a crucial initiative for systematic training of key stakeholders, offering tailored and region-specific courses to enhance ocean literacy.

Mr. Ian Butler noted the varying capacity across the region for science-based decision-making, underscoring the urgent need to bolster capacity-building assistance. He highlighted that even in areas with established capacity, practical aspects of science-based decision-making could be improved. Drawing on the case of the fisheries sector, he emphasized that successful stakeholder engagement involves a participatory process, integrating policymakers and scientists in the development of fisheries policies that are based on a scorecard system. Preventing the creation of policy vacuums and silos was highlighted as a replicable best practice, emphasizing the importance of connecting scientific research to policymaking for more informed and robust decisions. This approach underscores the necessity for adequate funding and resources to support comprehensive scientific research, with a view to enhancing the foundation for sound decision-making processes. Despite opportunities for interaction between policymakers and scientists, he noted that such collaboration is often hindered by time constraints and differing priorities. For instance, while scientists prioritize the publication of research articles, their research goals do not always align with policymaking needs.

Mr. Sebastian Herrera Kasic presented the challenges of interfacing with the general public and engaging the private sector in sustainable ocean management. He highlighted the need to bridge gaps in the availability of and accessibility to scientific data to enhance ocean literacy. It was noted that in the Latin American context, legal and legislative barriers can impede swift decision-making or actions for transformative changes needed for integrated ecosystem management. He shared notable tools for strengthening the science-policy interface in fisheries management applied in countries such as Chile, Ecuador, Colombia, and Peru. These include the co-management of marine and coastal areas by artisanal fishermen and the government; the development of a robust institutional framework for fishing and environmental matters; and government-led initiatives in public innovation to advance ocean data science supported by algorithms. He underscored the potential for further improvement in national ocean policies and programmes in the South Pacific region by delving deeper into the connections between academia and science to enrich the science-policy interface. He also underlined the potential of early ocean literacy education for instilling a lifelong attitude towards prioritizing sustainable ocean management.

With regard to the Co-Chair's query on ways to foster capacity development that supports the integration of science into decision-making, the panellists agreed that building a cooperative mechanism for policymakers and scientists to work together seamlessly requires time and a long-term perspective. In response to the specific question about ensuring the inclusion of ITLK to support policymaking, it was emphasized that citizen science could facilitate the inclusion of ITLK into mainstream

policymaking by allowing for inclusive consultative discussions on policy formation, a process which could be also further facilitated by utilizing AI. It was noted that this integration can take time to be fully implemented, and that continuous efforts are being made to further enhance the inclusion of ITLK stakeholders to ensure a healthy, sustainable ocean for all.

The importance of sharing best practices and raising awareness of ITLK as part of the solution was emphasized by the panellists. Through integration into policymaking processes and discussion forums, ITLK can be mainstreamed with sustained multi-stakeholder engagement. This approach can build ownership among ITLK stakeholders, reducing communication gaps and misinformation. The inclusion of ITLK as a cross-cutting theme in the annotated outline of WOA III marks a significant step forward in incorporating diverse scientific knowledge into policymaking. The panellists underlined that education and engagement in a multidisciplinary environment are essential ingredients for strengthening the ocean science-policy interface. It was emphasized that while the WOA has been continuously improving the science-policy interface, there is a need to accelerate its role in this area with a view to catalyzing urgent collective action towards decision-making underpinned by the best available ocean science. It was noted that a systematic integration of policy, science, literacy, and economy would be key to attaining the Ocean Decade goals in an inclusive manner. It was also noted that the Ocean Decade provides an enabling framework for connecting stakeholders from policy, science, and communication fields, fostering cooperative solutions and synergy.

A comment from the participants highlighted the crucial role of social innovation in enhancing human interaction with ocean ecosystems. Such enhancements also foster wider access to scientific knowledge, including contributing to the work of policymakers and managers who are involved in ensuring sustainable ocean stewardship. Ms. Evans noted that the WOA III writing process aims to draw from a broader pool of stakeholders, ensuring that its findings and data are widely accessible. The importance of communication as a key step in bridging this gap was reiterated. In response to a query on the epistemology of science-policy interface knowledge, it was noted that the science-policy interface might be considered an emerging field of knowledge, as manifested by the discussions held at the regional workshops of the Regular Process, where similar queries emerged questioning the interaction between policy and science. It was noted that tools such as the fisheries scorecard or the traffic light system are instrumental in quantifying and helping to streamline complex scientific data into formats that are easily understandable and actionable for decision-making. In this regard, it was highlighted that policymakers and institutions who are potential funders for ocean science research would benefit from these tools as they are able to understand complex ocean data and make informed decisions regarding management strategies and funding allocations for sustainable use of the oceans.

6. Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 3: the Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and the Gulf of Aden, and the ROPME/RECOFI area⁶

The segment Co-Chair, Mr. Rafael Gonzalez-Quiros, opened the session stating that the Indian Ocean might be one of the most diverse and complete oceans with dense coastal

⁶ Please see Annex II for a summary of key areas identified during the panel discussion.

population, highly populated countries, SIDS, and a high ecosystem diversity. He then introduced his Co-Chair, Mr. Justin Ananhanzo, as well as the speakers of the segment.

Ms. Razieh Gahouomi recalled that the subject of the science-policy interface is not just a professional matter, but also a personal commitment to finding sustainable solutions. She observed that participating in this effort entails exploring certain opportunities and improving the future of our oceans at both national and regional levels.

Ms. Francesca Adrienne underscored the importance of building bridges between science and policy. In this respect, the Seychelles could benefit more from existing technologies. She also highlighted the necessity to not only rely on government initiatives to build a science-policy interface, but also to include civil society: scientists, citizens, non-governmental organizations, among others. In order to do so, communication was listed as a key element. There is a need to bring more people to develop agendas and policies, keeping in mind that people on the ground are the ones who are actually dealing with some crucial issues, such as sea level rise, which is directly affecting the Seychelles.

Mr. Rafael Gonzalez-Quiros agreed that non-governmental organizations can play a crucial role to facilitate this dialogue between science and policy, as well as with the general public.

Mr. Mohammad Muslem Uddin began his intervention, noting that the Indian Ocean is probably the least known ocean. Due to geographical features (e.g. sediments), even satellites cannot access some parts of the Indian Ocean, such as the Bay of Bengal. He highlighted the need to reconcile potentially divergent interests, giving the example of fishing bans that directly impact fishers' communities in order to protect biodiversity. In this regard, ocean literacy can be used as an important tool to facilitate discussions between different stakeholders.

Mr. Justin Ananhanzo, before asking the first guiding question of the session, stressed the fact that the diversity of the speakers of this session is a clear proof of the importance of the topic. Following that, he asked the speakers to provide an overview on the existing mechanisms in their area.

In response to this question, all the speakers mentioned the wide diversity of organizations operating in the region and how it is crucial to develop synergies between them. The need to include economic cooperation in these mechanisms was mentioned. One speaker emphasized the difficulty for SIDS to be an active participating member of all the organizations due to their limited capacity, including with respect to human resources and finance, to name just a few. This also entails a lack of knowledge about the existing initiatives put in place as it is difficult to properly follow all the processes and be aware of all the publications. The problem is accentuated also due to their ever-increasing numbers. Other points raised included the impact of international sanctions which can hinder the transfer of technologies and access to resources, as well as the lack of interactions between academia and other stakeholders of the science-policy interface. Limited resources and a lack of infrastructure were raised as some of the major impediments to the harmonization of ongoing capacity-building initiatives in the region.

Discussions further focused on how to involve the younger generation more effectively in these processes, recognizing that the young generation and its education have to be our common priority. In this regard, the importance of providing academic pathways for the

youth which lead to meaningful employment in their field of study was underlined. It was proposed that in order to address this need, States could consider building strategic objectives based on long-term planning. This is particularly true for SIDS, where the scientific capacity pool can be small and focused on limited areas of expertise. Another proposed potential approach to this issue was proposed as working at the regional level, bearing in mind that ocean is a shared space. Another key element put forward was to develop frameworks for the meaningful integration of the younger generation in the decision-making process.

As for inclusiveness, the importance of creating more space for women to feel comfortable and not subjected to unconscious bias in some regional organizations was highlighted. Communication between different groups, such as women, indigenous, and local communities, among others, was also seen as crucial, including the emphasis on non-violent communication. Speakers drew attention to the urgency to recognize and document indigenous knowledge. Thus far, very few scientific papers incorporate such knowledge, which underscores the need for scientists to increase their direct engagement with these knowledge holders, including through the conduct of more interviews. It was noted that the annotated outline of WOA III reflects a good way of including ITLK, but it remains important to ensure that local communities feel part of the WOA process and not only as external observers. Another consequence of the lack of communication with local and indigenous communities is that these stakeholders do not fully understand the nature of and benefits derived from participation in some initiatives, including capacity-building programmes.

All the panellists agreed that the WOAs and the Ocean Decade can provide updated and critical information for policymakers, allowing them to take science-based decisions. Both mechanisms bring to the forefront the importance of ocean science and more particularly the increasing importance of some disciplines of science (e.g. oceanography) which may not be well known to some .

A participant underscored that researchers must be made aware of the importance of sharing their knowledge and the results of their research with policymakers and civil society. Another participant reiterated the importance that small organizations may play in the science-policy interface, particularly those which work with communities and develop materials with them. In this respect, the issue of trust between non-governmental organizations and governments was mentioned, as well as the need to find ways in which to ensure this can be addressed.

7. Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 4: the North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea⁷

Serving as Co-Chair, Ms. Maria João Bebianno opened the segment, and introduced all four speakers. The other Co-Chair, Ms. Francesca Santoro, emphasized the diversity of backgrounds represented on the panel and launched the discussion on the capacity-building gaps and needs currently existing in the region.

⁷ Please see Annex II for a summary of key areas identified during the panel discussion.

Ms. Iryna Makarenko provided her views on regional ocean governance, drawing on her experience of international ocean law. She shared an example of developing the Quality Status Report for the Mediterranean Sea, and the Black Sea, and the efforts to make it widely accessible and available for the general public. One challenge highlighted was on the sustainability of the deliverables for activities that need to be undertaken for various assessments. She underscored the importance of being aware of political realities in planning ahead for collection of data and compilation of relevant information, with the final goal of bringing science closer to policy in the region. As for capacity-building activities, she observed that significant work has been carried out in the European context. Communication in this area has been deepened and initiatives to develop day-to-day communications have been put in place. She referred to, among others, the holding of weekly meetings with the relevant European entities, and also dedicated meetings with regional seas organizations. Mechanisms for sharing best practices between regional sea organizations have also been cited. Finally, despite some challenges, including those emanating from the ongoing conflicts in the region, Ms. Makarenko emphasized the high level of capacity-building activities in the region.

Mr. Paul Snelgrove's intervention focused on fisheries, underlining the role of the science-policy interface in this field and the need for policy-makers to be properly advised on particular issues using the best available scientific information. In this respect, it was noted that experts from both the fishing industry and academia are needed. Highlighting the specific example of reports on fisheries, he underlined the reflections underway on the importance of observers' participation and on how to disseminate information to the general public in an understandable way. With regard to capacity-building activities, Mr. Snelgrove shared his perspective on how to make effective use of diverse knowledge sources (including ITLK) and how to make the scientific debate more inclusive. He underscored the necessity to co-develop and share knowledge, and to define conservation priorities that embrace indigenous knowledge and perspectives. It was noted that to be able to do so, it is also important to identify the systemic barriers to inclusivity. In this regard, the inclusion of an ITLK perspective in the WOAs was deemed important.

Ms. Christina Deligianni provided her reflections on the region from the perspective of an intergovernmental organization, working with the European Commission, among others, to mainstream SDG14 implementation in the Mediterranean region. She highlighted the many disparities that exist in a region that brings together a great diversity of countries, which is also a zone of conflict. The large number of institutions at the international, regional and national levels, including research institutes, also leads to overlaps. She also stressed the need to take tourism into account when examining the science-policy interface. It was noted that, tourism encompasses a wide range of marine activities, including fishing and shipping, among others, and that many commercial entities could provide useful data. As far as capacity-building activities are concerned, many efforts are being undertaken in the Mediterranean region, including by research institutes. As an example of cross-border collaboration, she mentioned the launch of "Blue Mission Hubs" in the Mediterranean to promote the interface between scientists and policymakers, from regional governments to civil society. She also cited the policy briefs developed by European marine ports as a good example of how to make science more accessible to policymakers, as well as the Coastal Pro project which is aimed at reskilling and upskilling young professionals from vulnerable communities to boost coastal community work in the blue economy.

Ms. Anne Marie Cooper provided her perspective based on her work in the region on the legislative aspects of ocean governance, and also with respect to the International Council for the Exploration of the Sea, and her focus on diversity, equity, inclusion. She highlighted that one sector not yet mentioned in the discussions is a key mechanism: defence and security. It was noted that entities operating in this sector may be keen to provide data. In this regard, she cited the example of data collected by NATO to study the impact of climate change on defence and security. In terms of challenges for the science-policy interface, she highlighted the disparities in terms of funding distribution. For example, it was noted that the amount of funding will not be the same for combating overfishing as that for sediment extraction. Despite these difficulties, Ms. Cooper underlined that the science-policy interface has a long track record of established dialogue, and can contribute to learning lessons.

In response to the question of inclusiveness, Ms. Makarenko indicated that the entities in charge of the Regional Seas Convention were striving to be more inclusive of women and indigenous populations. As a concrete example, she cited the recent establishment at UNESCO of a collaboration between the Danube River, the Mediterranean Sea and the Black Sea. Mr. Snelgrove gave two examples of the impact of government programmes on local communities. On the one hand, he explained that the ban on whaling in Canada had a direct impact on indigenous communities who had long practiced this activity. On the other hand, he highlighted that the establishment of lobster fishing quotas has led to problems with indigenous and local communities, and that a recent court ruling found that the government must take their situation into account when defining these quotas. Ms. Deligianni first recalled that it is important to agree on the meaning of the term “inclusiveness” before highlighting that indigenous and local populations have to be part of the solution and not of the problem. As an example, she mentioned the Greek island of Mykonos which faces an increasing number of tourists every season, with its population voicing concerns over tourism and climate change. In this regard, the inclusion in policymaking of local populations is crucial, even more so when it affects their livelihoods. In more generic terms, it is important to have clear messages and transparent communication when it comes to the ocean and to bear in mind the importance of multilingualism. Finally, Ms. Cooper stressed the need to identify people involved in the science-policy interface, so as to be able to make appropriate decisions later on. In this data, it is important to include gender, as the science-policy interface also has its gender biases.

With regard to the question of the role of the WOAs and the Ocean Decade, it was noted that they both play a key role at global, regional and national levels. Another strength of the WOAs is that they bring the whole world together to discuss ocean issues. Several panellists stressed the importance of synthesizing the findings of the WOAs for politicians and decision-makers. In the same spirit, it remains fundamental to also adapt the language so that it is accessible to all, including to particular groups. In this respect, social media campaigns were seen as a useful tool. Finally, it was underlined that SDG14 continues to be the least funded sustainable development goal, and that the Ocean Decade and the WOAs are opportunities to highlight this important SDG.

A participant highlighted the lack of work on the policy implementation aspect compared to policy development. The panellists agreed with this remark and stressed that many steps need to be taken into account when it comes to the science-policy interface. The need to adapt language to different audiences was highlighted, including in communications from research institutes and universities.

8. Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 5: the South Atlantic (between the African and American coasts) and the wider Caribbean⁸

As Co-Chair, Mr. Roberto Dantas de Pinho introduced the session and thanked the rapporteurs. The other Co-Chair, Mr. Peter Pissierssens introduced the panellists and regretted the absence of Ms. Rahanna Alicia Juman as a panellist due to travel-related problems.

Mr. Ariel Hernan Troisi highlighted the importance of the Symposium to improve and increase the science-policy interface, through the WOAs and the Ocean Decade. He observed that the South Atlantic region enjoys a well-developed framework of institutions at all levels: national, regional and global, as well as the human network. The current challenges are now to be able to give a clear message, to integrate other sectors and to build a robust scientific framework. He stressed the fact that despite the existence of ample capacity in the region, there is asymmetry in the repartition of the academic opportunities. Another key challenge pertains to ensuring sustained funding by establishing strategic plans, developing appropriate communication, raising awareness, and enhancing ocean literacy.

Mr. Alexander Turra proposed that it is thanks to the Regular Process that SDG14 exists, and that the Ocean Decade was made possible by SDG14. Using the example of Brazil, he mentioned the existence of participatory councils at different levels aimed at co-creating policies but also noted that the implementation of policies remains a challenge for young democracies. In addition, he referred to the Zone of Peace and Cooperation of the South Atlantic and the need to keep in mind the geopolitical aspects of the region. He cited numerous capacity-building initiatives in the region, such as courses in oceanography, capacity-building programmes for undergraduates, and agencies with graduate schools on governance, oceanography and transdisciplinary science.

Ms. Tricia Allison Lovell expressed her pride in participating in the Symposium, and in being able to share her views with such a large and diverse audience. She noted that she realized early in her career the importance of bringing science to the community we serve. She highlighted the complexity of the ocean governance architecture in the Caribbean region, which includes many overlapping entities, raising the issue of their collaboration and cooperation. She further elaborated on the increasing number of initiatives aiming to bring different actors around the table and warned that this could lead to too many simultaneous requests to stakeholders. She highlighted the lessons learned from the COVID-19 pandemic, which had devastating consequences while raising new challenges. She also emphasized the small pool of ocean experts in SIDS and the need for collaboration to overcome this lack of human capacity. It was noted that one solution is to rely more on young people, and with this in mind, she stressed the need to broaden our messaging and communication.

With regard to the participation of women and under-represented groups, one panellist noted that, while engagement in the region is important, communities need to be more involved in the discussions. In this regard, the importance of showing a clear intention to engage with them and creating a lasting relationship was emphasized. As regards to the

⁸ Please see Annex II for a summary of key areas identified during the panel discussion.

challenges, discussions focused on the crucial need to identify obstacles in terms of inclusion and equity. It was noted that this is the only way to overcome the challenges. Inclusiveness and equity were described as key elements in bringing together the best minds and hands to build a lasting relationship with the ocean. Examples of Brazilian initiatives aimed at involving women, local people and communities, as well as the LGBTQ community, were discussed as shown in a recent launch of a marine coastal assessment based on the idea to give voice to local and indigenous communities. For young people in particular, the possibility of establishing a youth parliament was mentioned. In addition, taking the example of fishing communities faced with dwindling fish stocks, Ms. Lovell stressed the importance of showing them how international mechanisms can help them cope with these difficulties.

The WOAs and the Ocean Decade have been described as having a strategic role. In this regard, it was reiterated that the Ocean Decade promotes a transformative approach from the outset and that this long-term perspective extends not only to 2030 but also beyond. Mr. Turra depicted the WOAs and the Ocean Decade as mechanisms capable of pushing and guiding States in different ways. In this context, the important role of the national and intergovernmental focal points of the Regular Process was stressed, as well as the importance of focusing on regional issues and the ability to meaningfully engage the local level. It was noted that both processes put the ocean at the forefront and can also help mobilize more resources, including human resources. Finally, the importance of the accessibility of WOA III results through a web-based dynamic portal was reiterated.

A question from the participants was related to the use of research findings in the development of management strategies. The speakers agreed on the importance of incorporating the scientific perspective into ocean strategic planning, acknowledging that this process may require some time. Another participant raised concerns about the implementation of capacity-building programmes in Africa that were mentioned during the discussion and emphasized that there are only five Ocean Decade Committees on the continent. In response to this intervention, Mr. Troisi indicated that gender and Africa are the two priorities of UNESCO.

Mr. Peter Pissierssens summarized the discussions of the panel, concluding by emphasizing the significance of the enduring impact of the WOAs and the Ocean Decade, and insisting on the need to think beyond 2030.

9. Importance of science communication and Ocean Literacy as a key element of the science-policy interface

Ms. Francesca Santoro, serving as Co-Chair, opened the segment underlining the importance of ocean literacy and the equitable sharing of knowledge through cooperative partnerships. She informed the audience that Mr. Vinicius Lindoso could not join the panel, and she expressed appreciation for his science communication efforts leading up to the Symposium.

Mr. Rodrigo Thomé began his intervention by providing an overview of the contemporary media landscape related to the ocean, consisting of visual images and social media, in addition to traditional forms of media. He emphasized that building a story from ocean data to engage people and make it personally relatable is a good strategy for enhancing outreach to the general public and better informing them about the state of the ocean and where actions are needed. It was noted that children and youth, in

particular, should occupy an essential place as a target audience for ocean literacy messaging, as they are in their formative years where a lifelong appreciation for the importance of sustainable management of the ocean could be instilled from early on. He noted that since ocean literacy is not part of most core school curricula for young children, it is important to find ways to communicate its importance to this young audience group.

Mr. Ronaldo Christofolletti delivered an intervention focusing on the lessons learned in strengthening the science-policy interface in the South Atlantic region. He emphasized the importance of establishing connections with target audiences, such as policymakers and the general public, among others, by tailoring messages in ocean science communication to be readily relatable and engaging for these specific groups. He noted that it should be assumed that most of the general public does not fully understand their relationship with the ocean, such as its role in oxygen generation and food production, and how best to preserve and protect the ecosystem services the ocean provides for everyday life. This was evidenced by a national survey which found that nearly half of the population in Brazil was largely unaware of how their lives are closely linked to the ocean. It was noted that the key ingredients for successful ocean communication include the information, the deliverer, and the audience. Delivering the right message to the right audience should be considered a crucial step forward. He shared an example where the publication of a research paper on oceanic metal pollution was amplified through a wide range of media. This led to communities in the affected area to question policymakers about the effects of metal in the ocean, with a view to finding solutions and urging policymakers to take adequate actions.

Ms. Francesca Santoro, speaking in her capacity as the lead for ocean literacy at IOC-UNESCO, proposed that IOC-UNESCO is ideally positioned, through its mandate, to advance the agenda of improving ocean literacy. It was noted that ocean literacy, started to gain momentum thanks to the solid foundation laid by researchers in the US back in the 2000s. It aims to bring the ocean to the forefront of socio-economic agendas and reach out to the general public to underscore the importance of concerted efforts to protect a healthy and sustainable ocean. She emphasized that having knowledge alone is not sufficient, as the knowledge needs to be put to use for catalyzing a broader change in society. She noted that a wide array of communication modalities available at our disposal could empower all ocean users to help collectively advance the ocean sustainability agenda. She underscored the importance of finding creative ways to connect with everyone regarding the ocean, noting that the ocean is an essential element embedded in cultural identities and also associated with early childhood memories. It was noted that communicating with diverse cultures requires tailoring the message and the methods of communication to the target audience in an appropriate manner. Sharing the example of the fashion industry, which is now deeply engaged in and concerned with making their business more compatible with sustainable ocean protection, she stressed the importance of finding initial connection points that could be leveraged for further engagement. This was recognized to be crucial for laying the foundation for moving the needle on enhancing ocean literacy.

Mr. Francois Bailet shared his views on ocean literacy and science communication, also highlighting the communication challenges posed by the technical language and the need for reinforced efforts to make such language more understandable to various stakeholders, especially policymakers. He mentioned the development of four brief documents on WOA II related to two key global issues (climate change and marine

biodiversity) and two United Nations programmes (the Sustainable Development Goals and the United Nations decades known as the United Nations Decade of Ocean Science for Sustainable Development and the United Nations Decade on Ecosystem Restoration) and the transformation of World Oceans Day from a closed session to an international event, emphasizing the importance of accessible communication in promoting sustainable ocean management. He concluded by indicating that while many present are not communication experts, the necessary expertise can be harnessed through collaborations and partnerships. Drawing on the example of the success of World Oceans Day in this regard, he further noted that this has led to a much wider and meaningful dissemination of information and subsequent engagement with governments and other stakeholders for the wider DOALOS Capacity-Building Programme.

Ms. Natasha Berg began her intervention by emphasizing the importance of tailoring the messaging of the WOAs to specific audiences for maximum outreach and impact. This involved collaborating with content creators who could help make the findings from the WOAs more accessible. She highlighted that understanding the key stakeholders should be the first step in developing ocean communication materials, aiming to identify their needs and finding better ways to address those needs. Forming partnerships with collaborators was recognized to be another crucial aspect that can amplify the reach of the key messages contained in the WOAs. A detailed analysis of social media platforms, including YouTube, Instagram, and LinkedIn, was presented. She shared examples of the Regular Process' social media efforts, some of which focus on presenting key messages from the WOAs as headlines followed by a brief paragraph with additional information. This underscores the importance of creating a harmonized branding campaign with unique visual themes based on a storytelling style. It was noted that a combination of attractive ocean visuals and messaging with a positive undertone has proven to be an effective strategy to capture the attention of a broader audience. The Regular Process website, for example, has been revamped to ensure a pronounced brand identity across all its webpages. Looking at the Regular Process outreach efforts, she highlighted the importance of using clear and straightforward language when developing press materials related to ocean science, making information more accessible to the wider public. She noted the importance of maintaining the momentum of communication, avoiding pauses or gaps in engaging with the audience.

The Chair inquired of the panellists what science communication tools they thought could be reinforced or added to the work undertaken by the Regular Process, including regarding and its WOA III. It was observed that amid the vast array of media content, it is crucial to significantly enhance the appeal of ocean communication messaging. The panellists concurred that this effort needs to focus on rising above all other competing media, attempting to shift the public's focus and encourage them to adopt a different perspective. They emphasized the end goal of these efforts should be to help the public realize the critical importance of preserving the ocean ecosystems. It was also noted that the key focus of ocean communication should be on the impact of the Regular Process and its WOAs, rather than just on the Regular Process. Such a shift could make the WOAs findings more relatable and foster a greater interest in ocean-related issues which speak to them individually, encouraging them to seek more information on how to manage ocean sustainably drawing on the WOAs' findings. The panellists concurred that there is no single definition of ocean literacy, nor is there one way to enhance it. It was noted that the sheer diversity of opportunities undertake to advance science communication was a powerful tool in itself, as it provides for wide-ranging user-specific approaches. It was underscored that the proper development of ocean literacy campaigns

requires a deliberate thought process, costing, and planning. It was also noted that enlisting the help of communication experts was advisable given the complexity and saturation of the media landscape.

A participant emphasized the lack of expertise in science communication in developing countries, which is often attributed to the absence of a designated budget line for communications. It was also noted that leveraging existing initiatives aimed at enhancing access to ITLK for its improved integration into science communication should be a key priority. Another participant highlighted the effectiveness of storytelling in communicating science to young audiences. A suggestion was made for G20 countries to allocate more funding for educational materials to enhance ocean literacy. It was noted that the Regular Process would need to increase its efforts in furthering science communication at the global level, since there are countries around the world that still do not allocate appropriate government budgets to the ocean, nor include ocean-related topics in formal school curricula. In this regard, the recent manual published by IOC-UNESCO, entitled “A New Blue Curriculum: A Toolkit for Policy-Makers,” was mentioned. It was noted that this manual provides recommendations and guidelines on how to incorporate ocean literacy into educational curriculum frameworks by 2025. The trend of increasing coverage of ocean biodiversity on social media was also noted, and it was indicated that this was evidence of the importance of proper packaging of narratives and the potential reach of such approaches.

10. Ocean Decade: WOA’s support on the Decade’s mission to generate and use knowledge for the transformational action needed to achieve a healthy, safe and resilient ocean for sustainable development by 2030 and beyond

The Co-Chair, Ms. Karen Evans introduced the segment highlighting the importance to reach not only policymakers but also the general audience. She briefly introduced the panellists and her Co-Chair, Mr. Julian Barbière.

Mr. Barbière presented the Ocean Decade Framework, including the 10 main Ocean Decade Challenges. He highlighted the importance of involving the private sector in discussions related to the science-policy interface. He then presented the current status of the Decade actions, the Decade regional and national coordination systems, as well as the commitment and awareness-raising mechanisms in place. He placed particular emphasis on a recently launched process, the Vision 2030 process, which is a strategic ambition setting process to identify a common measure of success for each of the 10 Ocean Decade Challenges on the road to 2030. The outcome of this process will be a series of white papers which should be available in early 2024 for public review. Finally, with regard to the relationship between the Ocean Decade and the WOAs, he reiterated the importance of making this relation concrete, and detailed possible mechanisms that could be used. Among the possible mechanisms that could be strengthened, he indicated that the Ocean Decade could contribute to filling the knowledge gaps identified by the WOAs, for example, through calls for actions. He also stressed the importance of strengthening links at regional and national levels, underlining that events such as the Symposium help forge such links.

Mr. Zaki Mubarak focused his intervention on the recently adopted BBNJ Agreement and its links with the Ocean Decade and the WOAs. After describing the content of the Agreement, he listed the main institutions which should be established once it comes into force. Both in describing the main pillars of the Agreement and in explaining institutions

such as the Conference of the Parties or the Clearing House Mechanism, Mr. Mubarak emphasized the role that scientific research will have to play. In this respect, he proposed that in order to streamline their action, it is essential that international institutions coordinate their work in areas of capacity-building and science-policy interface. It was noted that DOALOS should play a key role in this respect. He concluded his presentation by declaring that humankind cannot survive without the ocean.

Mr. Stephen Widdicombe began his presentation by emphasizing that climate change is not a new challenge, but rather something we have been dealing with for decades. As a result, processes already exist that, while not perfect, do contribute positively to addressing the issues. The present Symposium was given as an example. That said, it remains crucial to broaden the audience and reach the general public, as public pressure can serve to shape practices and policies in the long term. In this respect, ocean literacy has an important role to play. In addition, the Ocean Decade provides for opportunities for the sharing of views on the ocean and the benefits it can offer. As for the WOAs, they constitute an excellent summary of the current state of the ocean. However, there is still work to be done to demonstrate the usefulness of such an instrument and the benefits that can be derived from it. He recalled that, given the large number of similar reports published by the UN and other organizations, the communications publicizing the WOAs' outputs should be more clearly defined. This clarity is crucial to ensure that the WOAs do not merely become encyclopaedic references, but rather effectively guide and impact science-based decision-making.

Mr. Jean Aude presented on the submarine cable industry, beginning with a reminder that the creation of any new route requires a large amount of data from different scientific fields coupled with a strong commitment to ocean preservation. It is necessary to work on a global scale and share data via a specific database. However, sharing data is not an easy process, and faces several difficulties. Firstly, data held by the private sector is considered to be commercial data, and there may be a certain reluctance to share it. Secondly, the data may be voluminous and needs to be examined on a case-by-case basis to determine the relevance of the data for specific uses. Finally, data can be located in many different places, making it more difficult to find and access. Many platforms could be used to share relevant data. In this respect, he recalled that the Ocean Decade has specific groups of experts that can be reached, in particular those focusing on ocean mapping where the private sector could share data privately to facilitate this objective. He concluded by emphasizing that science is vital for policy-making, even more so in the context of global warming, and that the private sector should be able to contribute and, in doing so, help fill some of the existing data gaps.

Ms. Lorna Inniss underlined the importance that the involvement of the private sector represents in this discussion. The diversity of stakeholders represents a rich source of knowledge to share and can provide important leverage in discussions with political decision-makers. In this regard, the Ocean Decade brought together a wide variety of stakeholders, including young people. It was noted that communication between scientists and politicians is no longer enough and that it is important to include the general public. It was also noted that the IOC-UNESCO Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE) acts as the Ocean Decade coordinator for the region. In addition to a coordinating office in the Caribbean, a multi-stakeholder working group comprising community activists, representatives from the tourism, oil and gas sectors, and youth, among others, has been established, and is a good example of the type of communication that needs to be put in place, since exchanges between these

different stakeholders are of paramount importance. She concluded by stating that the Ocean Decade is a catalyst for the dissemination of knowledge, while the WOAs provide an overview.

Mr. François Marcel Auguste Houllier presented a number of events that will take place as part of the third United Nations Ocean Conference (UNOC), to be held in Nice in June 2025, and highlighted an event to be organized by IFREMER, the One Ocean Science Congress, to be held in Nice on the margins of UNOC. The aim of this event is to communicate with all stakeholders ahead of UNOC, focusing on priority issues that need to be addressed, such as plastic pollution, among others. Like the scientific congresses organized a few months before COP21 in Paris in 2015, this congress aims to make a scientific contribution to the third UNOC and to create momentum. The congress will be open not only to scientists, but also to the wider public. Finally, Mr. Houllier highlighted that the One Ocean Science Congress is a contribution to the Ocean Decade.

The floor was subsequently opened for questions and comments from the participants. A participant welcomed the intervention from the private sector and commended its presence in the room. Another participant stressed the need to keep in mind the history of the WOAs and the Regular Process in order to understand how things developed and what the starting point was. In tracing the genesis of the WOAs and the Regular Process, the participant emphasized that they had been created to provide a coherent and comprehensive assessment process for the ocean, and to improve the quality of the annual resolution on Oceans and the law of the sea adopted by the UN General Assembly.

11. Closing segment

Mr. Vladimir Ryabinin concluded the Symposium by reminding attendees of its focus on enhancing the science-policy interface, addressing regional capacity-building needs, and the roles of the WOAs and the Ocean Decade. He emphasized the need to explore how scientific knowledge can best support policy and action, considering the ocean as humanity's shared heritage. He stressed the necessity of collective efforts to overcome the tragedy of the commons and restore ocean health, advocating for sustainable ocean planning supported by robust science. He acknowledged the progress made thus far by WOA pioneers, laying a foundation for further enrichment in the Ocean Decade. He expressed gratitude to DOALOS for organizing the Symposium and to the participants for their meaningful discussions.

Ms. Kimberly Louis' closing remarks reflected on the Symposium's outcomes and emphasized the significance of the attendees, who will advance the key insights from intensive discussions on various regional aspects, aiming to bolster the ocean science-policy interface through global lesson sharing. She recognized the pivotal roles of DOALOS and IOC-UNESCO in uniting key stakeholders, raising awareness of the cooperative partnership essential for the development of WOA III and the Ocean Decade's success. She also warmly acknowledged Mr. Ryabinin's significant contributions to IOC-UNESCO in light of his imminent retirement.

Mr. Francois Bailet shared his reflections in his closing remarks, including expression of gratitude for the mentorship provided to him by Mr. Ryabinin at the early stage of his career. He thanked IOC-UNESCO for the ongoing outstanding collaboration, and Ms. Louis for her leadership in the context of the Regular Process. He also thanked all the panellists and participants, and noted the active contributions of the participants

throughout the Symposium. He also thanked the DOALOS Staff, also highlighting the important work of the rapporteurs. Highlighting the urgency of improving the quality and efficiency of the science-policy interface for ocean governance, he noted the high interest in the Symposium as evidenced by the more than 1,000 applications received.

Mr. Marco Boccia concluded the session by thanking all the participants for their valuable contributions during the two-day Symposium, wishing them safe journeys back home.

Annex I: Symposium programme

Programme

International Symposium of the United Nations Regular Process on strengthening the ocean science-policy interface

Division for Ocean Affairs and the Law of the Sea
in collaboration with
IOC of UNESCO

Paris, France (12-13 December 2023)
IOC-UNESCO Headquarters, Room IV

Tuesday, 12 December

Time	Agenda Item	Presenter/Coordinator
08:30 – 09:00	Registration	<ul style="list-style-type: none">❖ Representatives of IOC-UNESCO (Louise Robillard, Ying Jin)❖ Representatives of DOALOS (Jisun Hwang, Rachel Lucas)
09:00 – 09:05	Regular Process promo video	<ul style="list-style-type: none">❖ DOALOS (Jisun Hwang)
09:05 – 09:20	Welcoming and Opening remarks, focusing on intended outcomes: <ul style="list-style-type: none">• Awareness on the importance of the science-policy interface for ocean governance;• Understanding and knowledge on the science-policy interface through dialogue among multiple stakeholders from all levels;• Identification of regional and global lessons learned and priorities in reinforcing the science-policy interface;• Awareness on the importance of compatibility and synergies between assessments at the global and regional levels within the framework of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030)	<ul style="list-style-type: none">❖ Representative of IOC-UNESCO (Vladimir Ryabinin)❖ Co-Chair of the Regular Process (Kimberly Louis, Saint Lucia)❖ Representative of DOALOS (Francois Baillet)

Time	Agenda Item	Presenter/Coordinator
09:20 – 10:35	<p>1/ Overview of global ocean governance and importance of science-policy interface with theories and practice</p> <ul style="list-style-type: none"> ○ Co-production of knowledge through multi-stakeholder partnerships ○ Translation of data into policy-relevant information and knowledge [Proposal Experience from the IOC Ocean Information HUB] ○ Engagement of the scientific community and ocean users in global policymaking processes <ul style="list-style-type: none"> ▪ [Proposal focuses on Agenda 2030/SDG reporting process: Example form IOC on SDG reporting (14.3, 14.a) and SToR process] <p>2/ Addressing regional capacity development needs: lessons learned</p> <ul style="list-style-type: none"> ○ Building Member States capacities in policy-relevant ocean science – <ul style="list-style-type: none"> ▪ [Experience from the IOC CD Strategy and delivery mechanism (Global Ocean Teacher Academy)] ○ Regional cooperation in ocean assessment Bringing regional bodies together [IOC RSBs, UNEP Regional Seas, WOA Regions] <ul style="list-style-type: none"> ● Q & A: 10 min. 	<ul style="list-style-type: none"> ❖ Representative of IOC-UNESCO (Julian Barbiere co-moderator) ❖ Representative of DOALOS (Francois Baillet-also moderator) ❖ Peter Mosby Haugan, Institute of Marine Research, Norway, University of Bergen, Norway, Policy Director ❖ Kirsten Isensee, IOC-UNESCO ❖ Francisco Armando Arias Isaza, Colombia’s Marine and Coastal Research Institute – INVEMAR, General Director ❖ Immaculate Sware Semesi, Manager, Marine Parks and Reserves Unit (MPRU), Tanzania ❖ Johanna Diwa-Acallar, IOC Capacity Development Deputy Coordinator
10:35 – 11:00	<p>Background on Regular Process / World Ocean Assessment and presentation on nominating to the Pool of Experts and opportunities for contributing to the third World Ocean Assessment (WOA III)</p> <ul style="list-style-type: none"> ● Presentation: 15 min. ● Q & A: 10 min. 	<ul style="list-style-type: none"> ❖ Representative of DOALOS (Marco Boccia)
11:00 – 11:20	Coffee break	
11:20 – 12:50	<p>Regional deep dive 1 on capacity-building needs (incl. in the science-policy interface) and lessons learned: the North Pacific</p> <ul style="list-style-type: none"> ➤ Wenhai Lu, National Marine Data and Information Service, China, department director ➤ Yutaka Michida, Atmosphere and Ocean Research Institute, The University of Tokyo, Professor 	<ul style="list-style-type: none"> ❖ Co-Chairs: Representatives of the Group of Experts (Maria João Bebianno) & IOC-UNESCO (Kirsten Isensee) ❖ Rapporteurs (Jisun Hwang, Rachel Lucas)

Time	Agenda Item	Presenter/Coordinator
	<ul style="list-style-type: none"> ➤ Christine Gaebel, Deep-Ocean Stewardship Initiative; The University of Edinburgh, DOSI BBNJ Working Group Co-Lead ➤ Siara Jeanne Facon Nulada, Ecosystems Management Specialist II, Philippines Department of the Environment and Natural Resources Biodiversity Management Bureau 	
12:50 – 13:50	Lunch	
13:50 – 14:50	Side event on “UN World Ocean Assessment: Getting Society to understand (& care about) the state of the ocean”	
14:50 – 16:20	<p>Regional deep dive 2 on capacity-building needs (incl. in the science-policy interface) and lessons learned: the South Pacific</p> <ul style="list-style-type: none"> ➤ Juana Susana Jimenez Alcantara, Flanders Marine Institute (VLIZ) as NDC for Belgium and DIP, International Liaison Officer ➤ Ian Butler, Australian Bureau of Agricultural Resource Economics and Sciences, Assistant Director - Fisheries scientist ➤ Sebastian Herrera Kasic, Maritime Authority of Chile, in charge of International Affairs 	<ul style="list-style-type: none"> ❖ Co-Chairs: IOC-UNESCO (Alison Clausen) & Representatives of the Group of Experts (Karen Evans) ❖ Rapporteurs (Jisun Hwang, Rachel Lucas)
16:20 – 16:40	Coffee break	
16:40 – 18:10	<p>Regional deep dive 3 on capacity-building needs (incl. in the science-policy interface) and lessons learned: the Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and the Gulf of Aden, and the ROPME/RECOFI area</p> <ul style="list-style-type: none"> ➤ Francesca Adrienne, Seychelles Observatory for Research and Exploration Institute, Founder ➤ Razieh Gahouomi, Research Center for Environment and Sustainable Development, Department of Environment ➤ Mohammad Muslem Uddin, Professor, Department of Oceanography, University of Chittagong, Bangladesh 	<ul style="list-style-type: none"> ❖ Co-Chairs: Representatives of the Group of Experts (Rafael Gonzalez-Quiros) & IOC-UNESCO (Justin Ahanhanzo) ❖ Rapporteurs (Jisun Hwang, Rachel Lucas)

Wednesday, 13 December

Time	Agenda Item	Presenter/Coordinator
09:00 – 10:30	<p>Regional deep dive 4 on capacity-building needs (incl. in the science-policy interface) and lessons learned: the North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea</p> <ul style="list-style-type: none"> ➤ Iryna Makarenko, Permanent Secretariat of the Commission on the Protection of the Black Sea Against 	<ul style="list-style-type: none"> ❖ Co-Chairs: Representatives of the Group of Experts (Maria João Bebianno) & IOC-UNESCO (Francesca Santoro) ❖ Rapporteurs (Jisun Hwang, Rachel Lucas)

Time	Agenda Item	Presenter/Coordinator
	Pollution (Bucharest Convention), Pollution Monitoring and Assessment Officer <ul style="list-style-type: none"> ➤ Anne Marie Cooper, International Council for the Exploration of the Sea (ICES), ICES Professional Officer for Fisheries and Aquaculture Advice ➤ Paul Snelgrove, Departmental Science Advisor to Fisheries and Oceans Canada and Memorial University ➤ Christina Deligianni, Policy and Programs Director, Institute for Sustainable Development at European Public Law Organization (EPLO) 	
10:30 – 10:35	Group photo	❖ IOC-UNESCO photographer
10:35 – 11:00	Coffee break	
11:00 – 12:30	Regional deep dive on capacity-building needs (incl. in the science-policy interface) and lessons learned 5: the South Atlantic (between the African and American coasts) and the wider Caribbean <ul style="list-style-type: none"> ➤ Ariel Hernan Troisi, Servicio de Hidrografía Naval, Technical Secretary ➤ Alexander Turra, Oceanographic Institute, University of São Paulo, Professor ➤ Tricia Allison Lovell, Fisheries Officer, Antigua and Barbuda Fisheries Division 	❖ Co-Chairs: Representatives of the Group of Experts (Roberto Dantas de Pinho) & IOC-UNESCO (Peter Pissierssens) ❖ Rapporteurs (Jisun Hwang, Rachel Lucas)
12:30 – 13:00	Special event on “Launch of the Ocean Decade Capacity Development Facility”	
13:00 – 14:00	Lunch	
14:00 – 15:30	Importance of science communication and Ocean Literacy as a key element of the science-policy interface: <ul style="list-style-type: none"> • Intro by Moderator: Bring the highlights from the Communications Side Event • Panel discussion • Q&A with the audience <ul style="list-style-type: none"> ➤ Rodrigo Thomé (Digital Influencer): The WOA in the age of Digital Influence ➤ François Baillet (DOALOS): Ocean Literacy and Communications as emerging needs in capacity development ➤ Ronaldo Christofolletti (Co-Chair IOC OL Group of Experts; Co-Chair Ocean Decade Strategic Communications Group): Communicating science across the science-policy interface: Lessons from the South Atlantic ➤ Francesca Santoro (IOC/UNESCO) Ocean Literacy: Building society's interest in the WOA bottom-up ➤ Natasha Berg (Ocean Communicator) 	❖ Facilitated by IOC-UNESCO (Francesca Santoro)

Time	Agenda Item	Presenter/Coordinator
15:30 – 16:00	Coffee break	
16:00 – 17:00	<p>Ocean Decade: WOA’s support on the Decade’s mission to generate and use knowledge for the transformational action needed to achieve a healthy, safe and resilient ocean for sustainable development by 2030 and beyond</p> <ul style="list-style-type: none"> • Panel discussion • Q&A with the audience <ul style="list-style-type: none"> ➢ Stephen Widdicombe, Plymouth Marine Laboratory, Director of Science ➢ Jean Aude, Alcatel Submarine Networks, Marine Development Manager ➢ François Marcel Auguste Houllier, IFREMER, President and CEO ➢ Lorna Veronica Inniss, IOC UNESCO (IOCARIBE), Regional Coordinator ➢ Zaki Mubarak, Legal Department of Ministry of Marine Affairs and Fisheries, Research Fellow of Center for Sustainable Ocean Policy of Indonesia University 	<ul style="list-style-type: none"> ❖ Facilitated by IOC-UNESCO (Julian Barbieri) and GOE (Karen Evans) <ul style="list-style-type: none"> - WOA Group of Expert – Talking about gap assessment - Ocean Decade Vision 2030 Process, regular gaps assessment and focus for the next 4 years - Decade actions with focus on information generation for policy
17:00 – 17:30	Closing Remarks	<ul style="list-style-type: none"> ❖ Representative of IOC-UNESCO (Vladimir Ryabinin) ❖ Co-Chair of the Regular Process (Kimberly Louis, Saint Lucia) ❖ Representatives of DOALOS (Francois Baille, Marco Boccia)

Annex II: Consolidated key areas identified from the International Symposium of the United Nations Regular Process on strengthening the ocean science-policy interface

Way forward: Key areas identified from the International Symposium of the United Nations Regular Process on strengthening the ocean science-policy interface

1. Need for coherent capacity-building programmes: Develop structured programmes for integrated marine assessments. The World Ocean Assessments (WOAs) of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (Regular Process) have laid a strong foundation for identifying gaps and needs, enhancing coherence in the development of capacity-building programmes to support integrated ocean assessments.
2. Promoting synergies in capacity-building: Foster global, regional partnerships and coordination for ocean science capacity-building, noting the importance of inclusivity in incorporating Indigenous, Traditional owner and Local community Knowledge (ITLK) and leveraging the framework of the United Nations Decade of Ocean Science for Sustainable Development (2021-2030) to build communities of practice.
3. Reviewing global and regional needs: Evaluate how global and regional processes can meet identified needs for strengthening the science-policy interface for ocean governance, focusing on filling gaps highlighted by the Regular Process, its WOAs, and other ocean-related intergovernmental processes.
4. Tailored capacity development: Encourage national and local authorities to assess their specific capacity-building needs, with assistance provided where necessary. Utilizing examples and best practices from programmes such as the DOALOS Capacity-Building Programme and the Ocean Teacher Global Academy (OTGA) can offer valuable insights.
5. Strengthening human and institutional capacities: Enhance capacities for integrated assessments through training and cooperation projects. Leverage the experiences of relevant stakeholder organizations and the potential of providing funds for capacity-building, noting the differing needs of various oceanic regions.
6. Enhanced marine environment observations: Technological advancement in ocean observations can significantly boost marine science capacity and further effort is needed to ensure the sharing of its benefit undertaken in an equitable manner, taking into account emerging Artificial Intelligence (AI) technologies that reshape the way we access and manage knowledge. Emphasizing open data dissemination, inclusion of gender disaggregated data, and the interconnectivity of databases is crucial.
7. Guidance for capacity-building analyses: Develop guidelines to carry out capacity analyses, considering disparities in funding and resource utilization. Cooperation in various forms for knowledge sharing is key to ensuring successful implementation of SDG14 and collectively meeting the Ocean Decade challenges.
8. Enhancing ocean literacy: Ocean literacy is vital for all segments of society, including policymakers at all levels, to foster understanding and effective management of sustainable ocean ecosystems and coastal communities. Emphasizing ocean literacy in children is crucial for instilling a sense of lifelong stewardship needed for future sustainable ocean management.
9. Global ocean literacy initiatives: Worldwide collaborative efforts, such as those by the Regular Process which is accountable to the UN General Assembly, and IOC-UNESCO, are commendable for promoting ocean literacy. This is particularly relevant for implementing the BBNJ Agreement, ensuring decision-making grounded in robust ocean science.

10. Targeted communication strategies: Develop communication strategies for diverse audiences to raise awareness about the Regular Process and the Ocean Decade to effectively disseminate key scientific findings on the current status of the oceans. Summaries for policymakers and other knowledge products easily interpreted by policymakers, such as WOA brief documents and technical abstracts, are valuable.
11. Regular multi-stakeholder dialogues: Encourage ongoing dialogues at global and regional levels, focusing on best practices and lessons learned. The regional workshops of the Regular Process serve as successful examples of multi-stakeholder engagement in capacity-building to strengthen the ocean science-policy interface.

Annex III: List of participants

No.	First and middle names	Surname	Country of nationality/affiliation
1	Abbe Elizabeth Lockhart	Brown	British
2	Abdennaji	Laamrich	Moroccan
3	abdinahir Mohamed sheikh	Mohamud	Somali
4	Abreu de Almeida	Andre	Tara Ocean Foundation
5	Adam Joseph	Bloomquist	US
6	Adriana Isabel	Marques da Ressurreição	Portuguese
7	Agnès	Michelot	La Rochelle Université UMR CNRS 7266 LIENSs
8	Alan Joseph Clifton	Simcock	UK
9	Alda	Nikodemusa	Baltic Sea Region Spatial Planning Initiative VASAB
10	Alexander	Turra	Oceanographic Institute, University of São Paulo, UNESCO Chair for Ocean Sustainability
11	Ali Mabkhot Salem	Balobaid	Yemen
12	Alice	Soccodato	EMBRC-ERIC
13	Alison	Clausen	Australia
14	Almoukdad	Anas	CNRS
15	Amadou	Jaiteh	Gambia
16	Amadou Hamath	DIA	SENEGALESE
17	Ángel Ernesto	Muñiz Piniella	European Marine Board secretariat
18	Anne Chantal Marie	Lemaistre	UNESCO
19	Anne Marie	Cooper	USA
20	Anne-Sophie	Roux	-
21	Annette	Breckwoldt	Leibniz Centre for Tropical Marine Research (ZMT) Fahrenheitstrasse 6, 28359 Bremen, Germany
22	Anton Julian	Holland	NIVA Inc.
23	Antonella	Vassallo	Malta
24	Antonio	Di Natale	Italy
25	Ariel Hernan	Troisi	Argentina
26	Arshad	Rawat	Mauritius
27	Awni	Behnam	Switzerland
28	Benjamin Robert	Boteler	Research Institute for Sustainability (RIFS) / TMG Think Tank for Sustainability
29	Bernardo	Aliaga	Chile
30	BOPE LAPWONG	Jean Marie	Democratic Republic of Congo
31	Brittany Emma	Alexander	European Marine Board
32	Brunhilde	Manz	Efarco
33	Camille	Étienne	Climate Activist
34	Carla	Di Paola	Italian
35	Carla de Freitas	Campos	Oswaldo Cruz Foundation (Fiocruz)
36	Carole Elisabeth	Martinez	MedPAN
37	Caroline	Mawandji Masala	Wimafrika RDC

No.	First and middle names	Surname	Country of nationality/affiliation
38	Caroline	Mindus	-
39	Celine	Tiffay	FAO Fisheries and Aquaculture Department
40	Channimol	KY	Cambodia
41	Chloe Bennett	Nunn	United Kingdom and United States of America
42	Christina	Deligianni	Greece
43	Christine	Gaebel	Canada
44	Claudette	Briere Spiteri	IOC/UNESCO
45	Dahai	Liu	China
46	Daniel	Pieteron Mensah	Ghana
47	Daniela	Turk	Slovenia
48	Debarati	Sengupta	India
49	Denis	Bailly	University of Brest
50	Dina	Eparkhina	Belgium
51	Divine Gabriel	Brefo	Greenbelt Economic Development Ghana
52	Edgard Enrico	Cabrera Luna	Colombia, Switzerland
53	Elisabetta	Bonotto	Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization
54	Elizabeth Julia	Tirpak	National Oceanic and Atmospheric Administration, U.S. Department of Commerce
55	Emilie	McGlone	USA
56	Emmanuelle	Platzgummer	Ifremer (French national research institute for ocean science and technology)
57	ERICA EUGINA	BRADLEY AGUILAR	DELEGATION OF PANAMA AT UNESCO
58	Eva Zoe	Ramirez Llodra	Spain
59	Fatma	Messaoud	Ambassador
60	Folco	Soffietti	University Iuav of Venice - Corila
61	Francesca	Adrienne	Seychelles
62	Francesca	Santoro	IOC-UNESCO
63	Francis	Staub	International Coral Reef Initiative (ICRI)
64	Francisco	Mendes	Guinea-Bissau
65	François Marcel Auguste	HOULLIER	FRANCE
66	Françoise Gaill	Gaill	France
67	Fuad	Bateh	-
68	Gabriella Emese	Verbovszky	US / Hungarian
69	Gauthier	Carle	Ocean & Climate Platform
70	Georgienne Elizabeth	Bradley	United States
71	Gert	Verret	-
72	GHADA	BOUDASS	Université Paris 1 Panthéon Sorbonne
73	Gilles Marc Michel	LERICOLAIS	France
74	Gilles, Marie, Emile	Bessero	Académie de marine (French Maritime Academy)
75	Gissel	Bueno	Ministry of Foreign Affairs
76	Hicham	CHEAIB	Lebanon

No.	First and middle names	Surname	Country of nationality/affiliation
77	Hrönn	Egilsdóttir	Iceland
78	Ian Robert Jacques	Butler	Australia
79	Iara	Hakakian	Center For Climate Mobility) UNOPS, assisting Small Island Nations suffering the consequences of climate change.
80	Imali Udeshika Manikarachchi	Manikarachchige	Sri Lanka
81	Immaculate Sware	Semesi	Tanzania
82	Ina Tamara	Tessnow-von Wysocki	Germany
83	Iryna	Makarenko	Ukraine
84	Ivana	Jurin	Croatia
85	Jacqueline	Nightingale	University of Southampton
86	Jae Ryoung	Oh	Republic of Korea
87	Jailson	Bittencourt de Andrade	Centro Universitario SENAI-CIMATEC and Federal University of Bahia, Brasil.
88	Jean	Aude	France
89	JESUS OLOMO	NGUEMA ANGUE	GUINEA ECUATORIAL
90	JIANFANG	CHEN	China
91	Joachim	Claudet	CNRS (French National Center for Scientific Research)
92	Johanna Paula	Diwa	IOC-UNESCO
93	Jorge Juan	De Vicente Benito	Spain
94	Jose Luiz	de Araujo Moutinho Neto	Atlantic International Research Centre (AIR Centre)
95	JOSE MARIA	BELLIDO MILLAN	Instituto Español de Oceanografía (IEO-CSIC), Spain
96	Joseph Edmund	Nolan	Ireland
97	JUAN JOSE	RONCO ZAPATERO	Independent expert
98	Juana susana	Jimenez alcantara	Peru
99	Julia	Wald	-
100	Julian	Barbière	IOC-UNESCO
101	Justin	Ahanhanzo	IOC-UNESCO
102	Kadjogbe Abra	OLANLO Epouse AFANVI	Togo
103	Kåre Nolde	Nielsen	Denmark
104	Karen	Evans	Australia
105	Kerstin Samantha	Forsberg Ghio	Peru
106	Khelil	Nawel	Algerian
107	Kimberley Dawn	Moore	Canada
108	Kimberly	Louis	Saint Lucia
109	Kirsten	Isensee	IOC-UNESCO
110	Laura	Secorun Palet	Spanish
111	LEONARD ALFRED	NURSE	BARBADOS
112	LILIANA	Rodriguez Cortes	-
113	Lorna Veronica	Inniss	Barbados
114	Louis Jean	Demargne	IOC-UNESCO
115	Lucas	Bravo	FRANCE

No.	First and middle names	Surname	Country of nationality/affiliation
116	Maarten Sjaak	Heijnen	the Netherlands
117	Manon, Madeleine, Lucille, Nathalie	Rosenthal	Université Paris 1 Panthéon-Sorbonne
118	Marcel	Jaspars	Netherlands
119	Marck	Oduber	Dutch
120	Marco	Filippone	Italian
121	Maria Clare	Baker	UK
122	Maria João	da Anunciacap Franco Bebianno	Portugal
123	Mariana	Bruck Moraes Ponna Schiavetti	Université de Bretagne Occidentale
124	Marta	Álvarez Ballesteros	Spain
125	Martijn René	Manders	Netherlands
126	Mary Frances	Davidson	IOC-UNESCO
127	Mathias Dirk	Jonas	Germany
128	Maxime	de Lisle	France
129	Michael Andres	Ramirez Galeano	United nations
130	Michael Boakye	Asiedu	Ghana
131	Michele	Quesada da Silva	IOC-UNESCO
132	Michelle Jillian	Devlin	Professor - University of East Anglia, UK
133	Miguel Alexander	Bermejo García	Guatemala
134	Mohammad Muslem	Uddin	Bangladesh
135	MOHANNED HILAL	AL QARNI	Oman
136	Monika	Andreou	Cyprus
137	Mounir	Ghribi	Tunisia
138	Natasha	Berg	USA
139	Nguyen Thi Mai Anh	Nguyen	Vietnam
140	Nicaise Servais	DOUCKAGA NZENGUI	Congolese/Brazzaville
141	Niccolo	Bassan	Italy
142	NINSEMON EPOUSE ALABI	KIDA ROSE	Côte d'Ivoire
143	Nonhlanhla Philile	Mbatha	South African
144	NTYAM EPSE ONDO	SYLVIE CAROLE	CAMEROON
145	Ocal	Necmioglu	UNESCO/IOC/Tsunami Resilience Section
146	Oleksandr	Shchypstov	Ukrainians
147	Olivier	Laroussinie	France
148	Olivier	Thomas	University of Galway
149	Olivier Luc Marie	Thébaud	France
150	Olusola Matthew	Adeoye	NIGERIA
151	Papa Momar	CISSE	Senegal
152	Paul Vernon Richards	Snelgrove	Departmental Science Advisor to Fisheries and Oceans Canada and Memorial University
153	Peter	Pissierssens	IOC-UNESCO
154	Peter Mosby	Haugan	Institute of Marine Research, Norway

No.	First and middle names	Surname	Country of nationality/affiliation
155	Pia Ingela	Isaksson	Sweden
156	Pierre Paul Yves Jules	Brasseur	CNRS / IGE, Grenoble Alpes University, Grenoble, France
157	Porfirio	Alvarez Torres	Mexico
158	Pradeep Singh Arjan	Singh	Malaysia
159	Rafael	Gonzalez-Quiros	Spain
160	Ralf	Ebinghaus	Institute of Coastal Environmental Chemistry; Helmholtz-Zentrum Hereon, GERMANY
161	Razieh	Ghayoumi	Iran
162	Rebecca Jean	Kavanagh	Ireland
163	Richard	SEMPERE	FRANCE
164	Roberto	Dantas de Pinho	Brazil
165	Roberto	Cerda	Mexico
166	Rodrigo	Azevedo Thomé da Silva	Brasil
167	Romy Elisabeth Yvonne	HENTINGER	Tara Ocean Foundation
168	Ronaldo Adriano	Christofolletti	Brazil
169	Ronan	Long	WMU-Sasakawa Global Ocean Institute
170	Rosalia	Santoleri	Italy
171	Roxanne Elizabeth Donna	Graham	Grenada
172	Salvador Matias	Vega Telias	Chile
173	SEBASTIAN	HERRERA KASIC	CHILE
174	SHAFIQ UR REHMAN	SHAFIQ UR REHMAN	Pakistani
175	Sian Elizabeth	Rees	University of Plymouth, UK
176	SIARA JEANNE FACON	NULADA	Philippines
177	Sieglinde	Gruber	European Commission
178	Siyu	Yu	Texas A&M University
179	Stefan	Vukovic	Montenegro
180	Stella Jane	Alexandroff	Swedish
181	Stephen	Widdicombe	United Kingdom
182	Sunggyu	Kim	Republic of Korea
183	Tanya Kathleen	Brodie Rudolph	South Africa
184	Thomas	Blasdale	UK
185	Tiago	Pires da Cruz	Centre Emile Durkheim - Sciences Po Bordeaux
186	TOWHIDA	RASHID	Bangladesh
187	Tricia Allison	Lovell	Antigua and Barbuda
188	Tymon Przemysław	Zieliński	Institute of Oceanology Polish Academy of Sciences
189	Ulrik	Bernitt	GEOMAR Helmholtz Center for Ocean Research Kiel
190	Vanessa Sarah	Salvo	Italy
191	Vhulenda Edna	Mukheli	University of South Africa
192	Victoria Kirsten	Gunn	United Kingdom
193	Vladimir	Ryabinin	IOC-UNESCO

No.	First and middle names	Surname	Country of nationality/affiliation
194	Wenhai	Lu	China
195	Willem	Van Urk	Netherlands
196	Youna	Le Berre Lemaire Lyons	France
197	Youngdawng	Moh	Republic of Korea
198	Yusuf	Demirgul	Türkiye
199	YUTAKA	MICHIDA	JAPAN
200	Yuting	Hou	China
201	Zacharie	SOHOU	Benin
202	Zaki	Mubarok	Indonesia

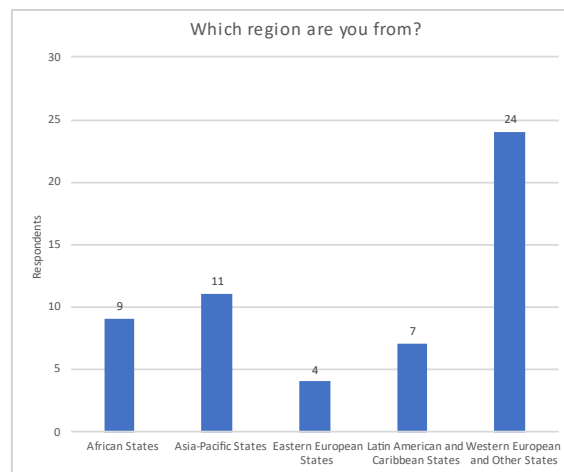
Annex IV: Post-Symposium survey outcome analysis

Post-Symposium Survey

International Symposium of the United Nations Regular Process on strengthening the ocean sciencepolicy interface

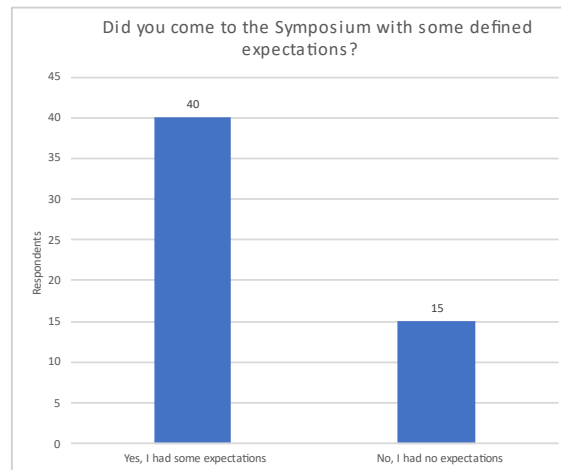
Paris, France (12-13 December 2023)

Which region are you from?



Respondents : 55

Did you come to the workshop with some defined expectations?



Respondents : 55

What were your expectations?

1. Objectives Related to Policy and Management of Oceans:

- Pushing ahead with the process of ocean management policy
- Making work proposals and highlighting regional challenges seeking contacts and ideas to apply in Chile.

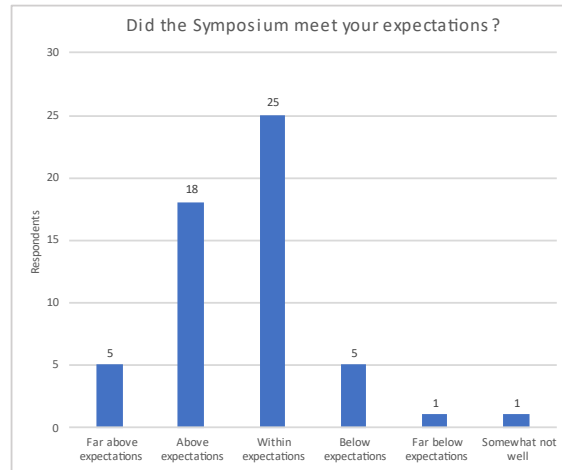
2. Desired Learning and Understanding:

- Seeking better information about IOC and WOA programs
- Aiming to understand improvements in science/policy communication and exploring techniques for better mutual communication.
- Learning more about the Regular Process Ocean Science Interface, and current trends in marine science/policy exchanges.

3. Expectations and Networking:

- Expectations to learn about the United Nations Regular Process strengthen the ocean science interface, and gather knowledge from speakers, experts, and panel discussions.
- Emphasis on knowledge exchange networking, and partnership.
- Focus on the connection between science and policy as well as promoting ocean literacy.

Comparing your expectations at the beginning of the Symposium and your opinion of it now. How well did the Symposium meet your expectations?



Respondents : 55

What parts of the Symposium worked particularly well?

1. Panel Discussions:

- Repeated themes in panel discussions helped reinforce key messages.
- Well-managed panel discussions contributed to effective messaging, although some were not as well -handled.
- Diverse perspectives were encouraged, and the panels addressed challenges and opportunities in various sea basins.

2. Communication and Engagement:

- The communication strategies and their initial outcomes were discussed.
- Presentations and engagement between presenters and session chairs were highlighted.
- Interactive discussions during panels and Q&A sessions were emphasized.

3. Regional Deep Dives:

- The regional deep dives were a notable aspect of the symposium.
- Expressions of experiences and lessons learned in the context of deep dives were shared.

4. Organization and Logistics:

- Overall organization and logistics were praised, including the management of panel discussions and the selection of speakers.
- The well-organized structure, timing of each panel, and the choice of speakers were commended.

5. Ocean Literacy and Science -Policy Interface:

- The importance of science communication and ocean literacy in the science -policy interface was emphasized.
- Various sessions on ocean literacy and the support provided by the World Ocean Assessment (WOA) to the Ocean Decade were highlighted.
- The symposium successfully brought together a diverse range of stakeholders, offering a global overview of ocean governance

What could be improved?

1. Symposium Duration and Agenda:

- Suggestions to extend the symposium by adding 3 more days or one week for a more comprehensive agenda and coverage of additional topics.
- Feedback on the preference for a 3 -day symposium to allow for a less compressed schedule.

2. Content and Regional Themes:

- Positive remarks about regional themes but concerns about repetitive content between regional panels.
- Desire for more dynamic panel discussions, increased audience engagement, and a focus on unique topics beyond ocean basins.

3. Logistical Feedback:

- Concerns about the logistics of participant airport pick -up, particularly for first -time attendees.
- Feedback on stipend instructions and the importance of timely sharing of flight details.
- Suggestions for improved logistics, including proper lunch arrangements.

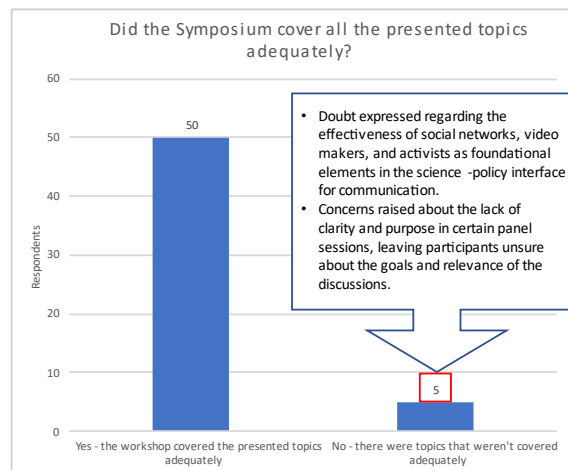
4. Interaction and Networking:

- Calls for more moments of exchange, Q&As, workshops, and dialogues.
- Recommendations for the initiation of an IOC National Ocean Literacy Focal Person nomination and continued connection between initiatives.
- Desire for more representation from diverse panels and stakeholders, including those exploiting oceans for commercial purposes.

5. Communication and Presentation Style:

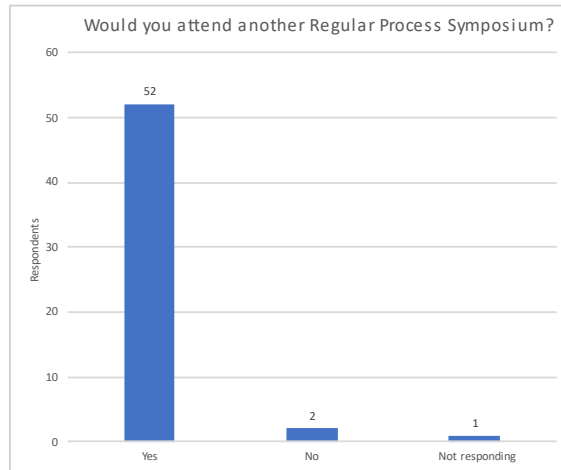
- Emphasis on the role of communication as an interface for Ocean Science and Policy.
- Suggestions for more interactive discussions, avoiding formal presentations, and dedicating more time to Q&A.
- Requests for more open access to presentation materials and information sharing during the symposium

In your opinion, did the Symposium cover all the presented topics adequately?



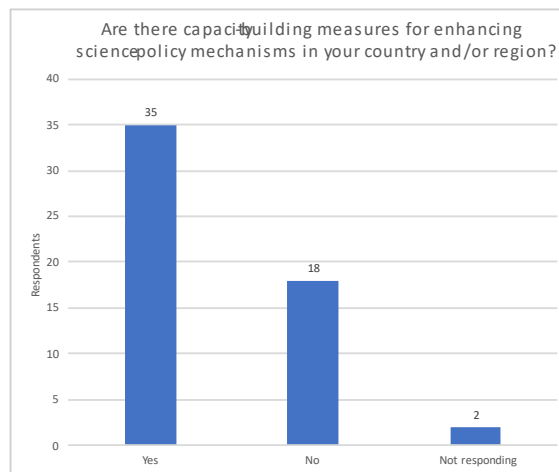
Respondents : 55

Would you attend another Regular Process Symposium?



Respondents : 55

Are there capacity-building measures for enhancing science-policy mechanisms in your country or region?



Respondents : 55

Can you name the entity that is providing such measures?

African States

- Institut de Recherches Halieutiques et Océanologiques du Bénin

Asia-Pacific States

- Japan Society for Ocean Policy
- Ocean University of Sri Lanka

Eastern European States

- Black Sea Commission

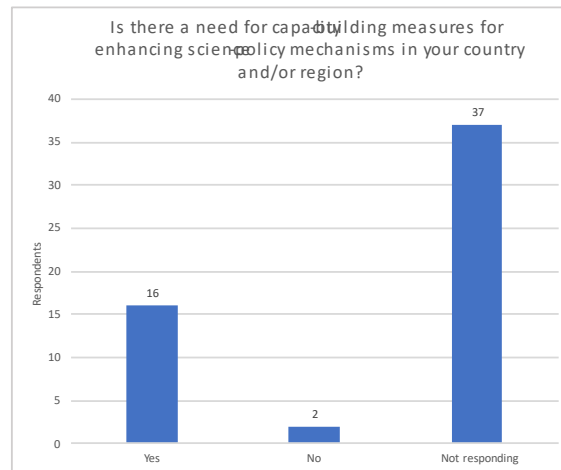
Latin American and Caribbean States

- Coastal Zone Management Unit, Barbados

Western European and Other States

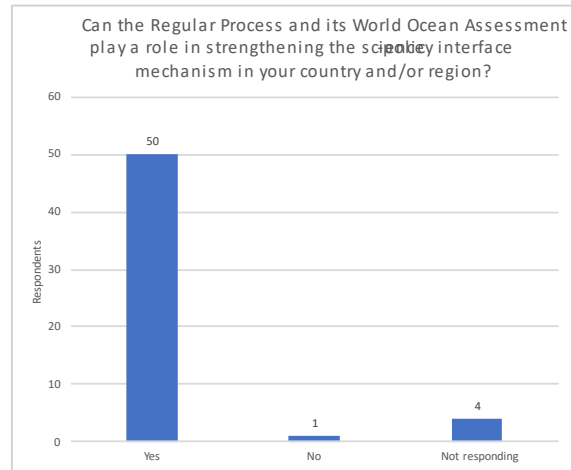
- Foreign and Commonwealth Development Office, UK
- Atlantic International Research Centre (AIR Centre)
- Institute of Marine Sciences (ISMAR), Italy
- European Marine Board
- ICES
- SciTechDiploHub
- National Science Foundation, USA
- Department for Environment Food and Rural Affairs, UK
- Oceano Azul Foundation, Portugal
- Center of Marine Sciences, Portugal
- Mission Ocean, EU
- National Committee, UK

Is there a need for capacity-building measures for enhancing science-policy mechanisms in your country and/or region?



Respondents: 55

Do you think the Regular Process and its World Ocean Assessment can play a role in strengthening the science-policy interface mechanism in your country and/or region?



Respondents : 55

How can the Regular Process and its World Ocean Assessment play a role in strengthening the science-policy interface mechanism in your country and/or region?

African States

Oceans Affairs and International

Treaties:

- Emphasis on creating and operationalizing maritime and oceans affairs and ratifying relevant treaties and conventions.

Capacity Building and Experience

Sharing:

- Priority on capacity building and experience sharing, particularly from African and small island states.
- Focus on capacity building for decision-makers, scientific and local communities, and media personnel.

Continued Outreach and

Recommendations:

- Encouragement to continue current efforts with increased outreach.
- Recommendations and proposals to address the science-policy interface, particularly through national meetings to inform and communicate the advantages of the process.

Asia Pacific States

Awareness Improvement:

- Focus on improving awareness of ocean issues among the public and policy-makers.

Capacity Building and Networking:

- Emphasis on capacity building programs and utilization of PoE networks.
- Encouragement for question or target-oriented basic research to identify strengths, gaps, and prioritize issues.

Enhancing Science -Policy Interface:

- Recognition of the potential for the World Ocean Assessment (WOA) and the Regular Process to strengthen the science-policy interface.
- Strategies include wider participation, increased publicity, and the use of meetings, printed materials, and targeted media for effective dissemination of information and recommendations.

Eastern European States

Regional Involvement:

- Engagement of Eastern European States in ocean-related discussions and initiatives.

Coordinated Quality Science

Reviews (QSR):

- Coordination of Quality Science Reviews (QSR) to ensure **comprehensive assessments**.

Promoting Interactions:

- Emphasis on promoting topics related to oceans on various platforms and providing a platform for interaction between scientists and policymakers.

Latin American and the

Caribbean States

Regional Engagement:

- Involvement and collaboration of Latin American and Caribbean States in the process.

Integrated Assessment for

Decision Making:

- Providing a coherent integrated assessment to assist and inform decision-making.

Communication and Capacity

Building:

- Sharing success stories, extracting proposals and ideas for implementation in the region, and obtaining feedback through UN/DOALOS.
- Utilizing various channels, including webinars and partnerships with regional institutions, to provide effective and updated information on the ocean and offer capacity-building opportunities

Western European and Other

States

Transferring Scientific Expertise:

- Facilitating the transfer of scientific expertise into actionable knowledge for societal benefit.

Enhancing Ocean Literacy and

Valuation:

- Increasing ocean literacy and emphasizing the valuation of marine ecosystem services in ocean management and decision-making.

Promoting Collaboration and

Providing Evidence:

- Promoting collaboration among different disciplines and stakeholders.
- Providing good scientific data and knowledge usable by policy and decision-makers.
- Offering insights on ocean measures, solutions, and policies.

Can you select 3 topics covered by the chapters of the WOA II or in the annotated outline of WOA III that are considered important for your country?

African States

Chapter on Communication in WOA 3:

- Advocacy for including a dedicated chapter on communication as a tool for Ocean Science to Policy in WOA 3.

Significant Chapters for the Region in WOA 2:

- Highlighting the importance of specific chapters (Chapter 7, Chapter 20, Chapter 26) from WOA 2 for the country/region.
- Focused on capacity development, protecting marine biodiversity, and promoting research and technology.

Key Environmental Concerns:

- Identifying environmental impact, tourism, recreation, sustainable economic use of the ocean, and addressing factors like marine mining and equitable distribution of benefits.
- Recognizing the impact of marine plastic litter on climate change, ocean acidification, and the importance of capacity building.

Asia Pacific State

Ecological and Social

Dimensions:

- Emphasis on biodiversity, coastal development, and gender issues.

Integrated Coastal Management:

- Focus on coastal communities, maritime industries, and evolving trends in marine environment management.
- Highlighting the capacity of ocean science to contribute to sustainable development.

Diverse Aspects of Ocean Science:

- Encompassing coastal development, scientific understanding of the ocean, and the role of ecosystems in the carbon cycle.
- Addressing ocean governance, deep-sea exploration, and the issue of marine litters.
- Including ocean observing, seabed mapping, ocean modeling, and understanding human-ocean interactions

Eastern European States

Pollution Concerns:

- Highlighting the issue of land-based pollution as a significant concern.

Diverse Oceanic Challenges:

- Addressing multiple challenges, including marine litter, cetaceans, and nutrient-related issues.

Integrated Monitoring and Assessment:

- Emphasizing the importance of monitoring, modeling, and forecasting.
- Covering trends in the physical and chemical state of the ocean, biodiversity, climate change, and adherence to the Barcelona Convention.

Latin American and the Caribbean States

Regional Emphasis on Ocean Economy:

- Recognizing the critical importance of the ocean economy for the region.

Key Focus Areas:

- Highlighting socio-ecological systems, biodiversity, and governance as central themes.

Strategic Priorities:

- Emphasizing sustainability pathways, equity considerations, and addressing ocean hazards.
- Advocating for a sustainable ocean economy and integrating One Health principles.

Western European and Other States

Core Chapters and Themes:

- Identifying key chapters in the outline, such as Drivers, Scientific Understanding, and Socio-ecological Systems.
- Emphasizing the importance of Biodiversity, Habitats, Pressures, and their interconnections.

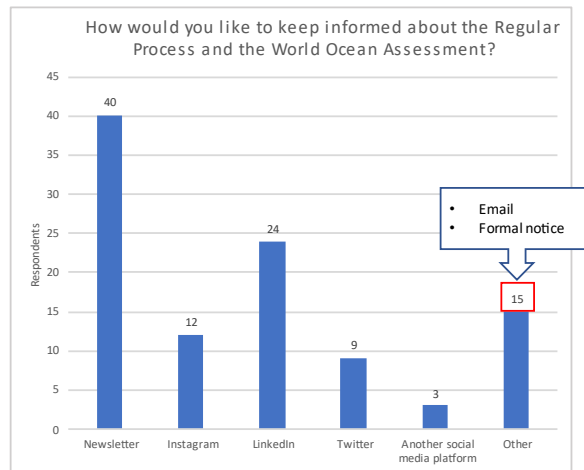
Holistic Coastal Approach:


- Prioritizing coastal communities, social and economic aspects, and sustainable development.
- Addressing the economic, governance, and renewable energy aspects.

Multi-dimensional Perspectives:

- Considering diverse perspectives, including the intersection of fish, society, and ocean, as well as oil-related concerns.
- Highlighting global overviews of ocean governance, socio-ecological systems, and the One Health approach.

How would you like to keep informed about the Regular Process and the World Ocean Assessment?





Any further comments

1. Expressions of gratitude for the symposium and availability for continued cooperation or participation in similar instances, including potential work in the region.
2. Recommendations for improvements, including more time for the symposium, seminars conducted in multiple languages with translation support, and additional space for open discussion.
3. Positive feedback on the valuable meeting, satisfaction in understanding the role in ocean preservation, and expressions of gratitude for organizing the symposium

Annex V: Speakers booklet

Segment 1: Welcoming and opening remarks



Vladimir Ryabinin

Executive Secretary of the Intergovernmental Oceanographic Commission (IOC) of UNESCO and Assistant Director-General of UNESCO

Vladimir Ryabinin is the Executive Secretary of the IOC, the Intergovernmental Oceanographic Commission of UNESCO, and Assistant Director-General of UNESCO. He is an oceanographer, marine engineer, meteorologist, and climatologist. He originated several mathematical models for the ocean, atmosphere, wind waves, etc., and is an author of hundreds of scientific publications. Since 1980s, Dr Ryabinin has been involved in various capacities in the activities of the United Nations and contributed to core design and coordination of such international initiatives, as the Global Ocean Observing System and the World Climate Research Programme. The current work of IOC and Dr Ryabinin is focussed on creating a solid scientific foundation for managing the ocean sustainably, including through the UN Decade of Ocean Science for Sustainable Development, 2021-2030.



Kimberly Louis

Co-Chair of the Ad Hoc Working Group of the Whole on the Regular Process

Ms. Kimberly Louis is a career Diplomat with just under twenty years of service to the Government of Saint Lucia. She currently serves as the Deputy Permanent Representative of Saint Lucia to the United Nations in New York. Her career began in Bilateral relations, first with responsibility for the Asia Pacific region, then leading on Western Hemisphere Affairs in the Ministry of External Affairs, before being assigned to one of the Multilateral desks and consequent posting to the Permanent Mission of Saint Lucia to the United Nations in New York. Ms. Louis has been her country's lead negotiator, for many international agreements, including three out of the four major agreements of the post-2015 development agenda and most recently the BBNJ Agreement. She currently serves as Co-Chair of the Ad Hoc Working Group of the Whole of the General Assembly on the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects.



François Bailet

Senior Legal Officer,
Division for Ocean Affairs and
the Law of the Sea (DOALOS)

François Bailet, BSc (Environmental Sciences), Diplôme d'Étude Approfondies (Law and Economics of Development) and PhD (International Public Law) served as the late Elisabeth Mann Borgese's Special Assistant for almost a decade until her passing in 2002, after which he was appointed Deputy Executive Director of the International Ocean Institute Network (IOI), then Expert Advisor in Ocean Governance to the IOI, and Honorary Adviser to the President of IOI. In 2004, he assumed a post with the United Nations, in the Division for Ocean Affairs and the Law of the Sea (DOALOS), Office of Legal Affairs, where he now serves as Senior Legal Officer.

Currently at DOALOS, Mr. Bailet oversees the Capacity-Building Unit and the Trust Funds Unit of DOALOS, coordinates the Maritime Security Cluster, and leads the United Nations marking of World Oceans Day. He also served as the Secretary of the General Assembly's Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects.

Segment 2: Overview of global ocean governance and regional capacity development needs



Francois Bailet

Senior Legal Officer, DOALOS

See segment 1.



Julian Barbière

Head, Marine Policy and Regional Implementation Section, IOC-UNESCO

Julian Barbière is head of the Marine Policy and Regional Coordination Section at the Intergovernmental Oceanographic Commission (IOC) of UNESCO. Educated as an environmental scientist, he has approximately 25 years of experience at the international level in the field of ocean sustainability, ocean governance, science/policy interface, and the development of technical cooperation in the field of ocean science. Playing a critical role in the development of several UN initiatives such as the preparation phase of the World Ocean Assessment, the technical framework leading to SDG14, or a global initiative in marine spatial planning that has inspired many nations to move towards ecosystem-based management approaches. Since 2017, he has been spearheading the development and coordination of the UN Decade of Ocean Science for Sustainable Development (2021-2030), also acting as the Decade Global Coordinator.



Hans-Otto Pörtner

Alfred-Wegener-Institute, Professor

Hans-Otto Pörtner is a physiologist and marine biologist performing research at the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI). Hans-Otto was Coordinating Lead Author of Ocean Systems Chapter to the IPCC Fifth Assessment Report, published in 2014, and was elected Co-Chair of Working Group II in 2015. Under his co-leadership Working Group II published the IPCC Special Report on Ocean and the Cryosphere in a Changing Climate in 2019 and its Main Report in 2022. In addition, he co-led the Scientific steering committee for the IPCC-IPBES co-sponsored workshop and report 2021 on “Biodiversity and Climate Change” and was a member of the Scientific Steering Committees of the IPCC-ICOMOS-UNESCO international co-sponsored meeting on Culture, Heritage and Climate Change, held in 2021. Hans-Otto is an elected member of the European Academy of Sciences and was appointed by the German government to its Advisory Council on Global Change in 2020.



Peter Mosby Haugan

Institute of Marine Research, Norway,
University of Bergen, Norway, Policy
Director

Peter M Haugan is Policy Director at the Norwegian Institute of Marine Research (IMR) and professor of oceanography at the Geophysical Institute, University of Bergen. He serves as Lead Expert for the High Level Panel for a Sustainable Ocean Economy. During 2015-2019 he was the elected Chair of the Intergovernmental Oceanographic Commission (UNESCO/IOC). He was responsible for IMR's Global Development Programme from 2019 and was part time on loan from IMR to the Norwegian Ministry of Foreign Affairs 2021-2022. His professional background covers physical oceanography, ocean-based climate solutions with emphasis on renewable energy as well as ocean carbon cycling, ocean climate processes and seafood. He has held professorship at University of Bergen since 1999, was Deputy Director of the Bjerknes Centre for Climate Research since its start in 2000 until 2003 and was the head of the Geophysical Institute 2003-2011. He has also worked at the University Centre in Svalbard, the Nansen Environmental and Remote Sensing Center and in industry. His present focus is on science advice and science-policy-society interactions.



Kirsten Isensee

Programme Specialist, IOC-UNESCO

Kirsten Isensee has been a programme specialist at the Intergovernmental Oceanographic Commission of UNESCO since 2012. Her work focuses on ocean carbon sources and sinks, trying to distinguish the natural and anthropogenic influences on the marine environment in support of the 2030 Agenda for Sustainable Development, contributing to the achievement of the outcomes of the UN Decade of Ocean Science for Sustainable Development. She provides technical assistance to emerging ocean science activities and facilitates collaboration between scientists, policymakers and stakeholders, via networks such as the Global Ocean Acidification Observing Network and the Ocean Acidification Research for Sustainability Decade programme, the International Blue Carbon Initiative, the International Partnership for Blue Carbon, the Integrated Ocean Carbon Research Working Group, as well as the Global Ocean Oxygen Network and the related Decade programme Global Ocean Oxygen Decade. In addition she oversees the production of the Global Ocean Science Report and supports the publication of the State of the Ocean Report. She received her diploma and her PhD in marine biology from the University of Rostock, Germany.



Francisco Armando Arias Isaza

Colombia's Marine and Coastal Research Institute – INVEMAR, General Director

Francisco A. ARIAS-ISAZA, Buga, Colombia. Captain (Ret) Colombian Navy holds a title as Expert in Chemistry and Biology (1979), Marine Biology of Jorge Tadeo Lozano University (1982) and DEA in Coastal Management of Nantes University (1996). Through his career in the Navy engaged in marine research, oceanographic cruises, academic support and mostly in the development of the foundations for Colombia's coastal zone management. With the establishment of the Ministry of Environment of Colombia (1993) Captain Arias-Isaza was elected the first director of the transformed Marine and Coastal Research Institute – INVEMAR (1995). Under his orientation Colombia declared for the first time a National Policy for the Management of the Coastal, Marine and Insular Areas (PNAOCI, 2000) leading to the development of different actions in the protection of natural areas, the identification of coastal climate change vulnerabilities, marine spatial planning, among others for Colombia. On others, he has been part of Colombian delegations in environmental and marine international fora and negotiations, member of the

Executive Planning Group of UN Decade of the Oceans (2018) and recently appointed as Chair of POGO, among other distinctions.



Immaculate Sware Semesi
Marine Parks and Reserves Unit
(MPRU), Tanzania, Manager

Dr. Immaculate Sware Semesi is skilled with 20 years' experience in research, and management of natural resources for sustainable development, and with a solid experience in managing different levels of projects, budgeting processes, monitoring & evaluation, and administration. Currently working as a Manager for Tanzania's Marine Parks and Reserves, is responsible for the governance of coastal and marine resources of Tanzania within the 2,000 km² parks areas. Dr. Semesi was previously a Lecturer and Researcher with the University of Dar es Salaam, School of Aquatic Sciences and Fisheries. After working with the University of Dar es Salaam for more than 10 years, was nominated under special parliamentary seat, at the National Parliament and served for 5 years, a position that had given Dr. Semesi exposure into the political realm, lobbying and negotiation skills, as well as formulation of policies, law making and national programmes, and national budget scrutiny. Further, working at the Tanzania's National Environment Management Council (NEMC) as Principle Environmental Management Officer, was a platform that allowed to putting into action the national environmental act (2004) and its regulations, as a tool to address key national environmental challenges, including climate change.



Johanna Diwa-Acallar
IOC Capacity Development
Deputy Coordinator

Johanna Diwa-Acallar is a capacity development specialist with experience in international development cooperation spanning over 15 years. At UNESCO IOC, she supports the global coordination of IOC's capacity development programmes and coordinates the IOC Group of Experts on Capacity Development (GE-CD), contributing to important IOC initiatives such as the new IOC CD Strategy 2023-2030 and the Ocean Capacity Development Hub (oceancd.org). Johanna has professional and academic background in issues related to the United Nations sustainable development agenda, having worked in various UN think-tank and research agencies such as the United Nations University (UNU), the United Nations Institute for Training and Research (UNITAR), and as Capacity Development

Programme Manager of a UNDP/GEF regional ocean governance project. Johanna received a Bachelor's Degree in Philosophy (Cum Laude) from the University of the Philippines, and holds advanced professional degrees in international education and human sciences from Hiroshima University, Japan.

Segment 3: Background on Regular Process / World Ocean Assessment



Marco Boccia

Programme Management Officer
and Technical Lead of the Regular
Process secretariat

Marco Boccia, BSc (International Relations major in International Public Law) and MMM (Marine Affairs major in Fisheries Governance) has worked in the field of ocean governance for almost two decades. He has covered several roles within various international organizations, such as the International Ocean Institute (IOI), the European Commission, Directorate-General for Maritime Affairs and Fisheries, the Food and Agriculture Organization of the United Nations (FAO) and now with the United Nations, in the Division for Ocean Affairs and the Law of the Sea (DOALOS), Office of Legal Affairs.

Currently at DOALOS, Mr. Boccia coordinates and leads the DOALOS team on the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects, and serves as Deputy-Secretary of the General Assembly's Ad Hoc Working Group of the Whole of the Regular Process.

Segment 4: Regional deep dive 1: the North Pacific



Maria João Bebianno
Member of the Group of Experts

Maria João Bebianno is a retired Full Professor of the University of Algarve. PhD in Marine Ecotoxicology from the University of Reading (UK) and in Oceanography from the University of Algarve and habilitation in Earth, Marine and Environmental Sciences from the University of Algarve. She was Director of the Faculty of Marine and Environmental Sciences (2005-2009)-and of the Centre for Marine and Environmental Research (CIMA) (2016-2023) of the University of Algarve. She is currently a member of the Group Expert of the Regular Process for the Assessment of the State of the Marine Environment, including the Socio-Economic Aspects of the United Nations. At the National level she is a member of the Portuguese Commission for the Decade of Ocean Science for Sustainable Development and of the Portuguese Committee for the Intergovernmental of the Oceanographic Commission. She is also a member of the Superior Council of the Navy's Center for Strategic Studies and President of the General Assembly of the Portuguese Association of Women Scientists – AMONET.

See segment 2.



Kirsten Isensee
Programme Specialist, IOC-UNESCO



Siara Jeanne Facon Nulada
Ecosystems Management
Specialist II, Philippines
Department of the Environment
and Natural Resources
Biodiversity Management Bureau

Ms. Siara Jeanne F. Nulada has been in the marine environment advocacy for a decade. Holding a degree in Aquaculture from the University of the Philippines in the Visayas, she currently serves as an Ecosystem Management Specialist II within the Coastal and Marine Division of the Department of Environment and Natural Resources, Biodiversity Management Bureau.

Ms. Nulada, a licensed SCUBA diver, actively engages in coastal and marine habitat assessments, specializing in monitoring and implementing conservation initiatives, particularly for coral reefs and seagrass ecosystems. Her work extends beyond field activities, as she plays a key role in shaping policies and strategies for sustainable coastal and marine management.

Ms. Nulada, leveraging ocean sciences, integrates adaptive management strategies, crucially reviewing approaches for the delicate balance between environmental preservation and development. Her objective is to align marine conservation efforts with a commitment to substantively contributing to policies safeguarding oceans for future generations. She believes applying the latest scientific insights bridges the gap between research and policy decisions for more informed and sustainable practices.



Wenhai Lu
Director of Division of Marine
Ecology, National Marine Data
and Information Service, Tianjin,
China

Wenhai Lu is a scientific adviser with 20 years of experience working both in academia and at the science-policy interface. He is currently involved in research related to marine ecological protection and management, including marine ecological monitoring and evaluation, marine spatial planning, marine ecological restoration, and blue carbon, to support decision-making for Ministry of Natural Resources of the People's Republic of China. He has developed technical methods such as marine habitats classification and mapping, marine ecological significance assessment, marine development suitability, and so on, which are adopted nationwide, and carry out applications on ecological zoning and spatial planning, promoting to marine ecosystem-based management in China. He undertook projects with International Union for Conservation of Nature (IUCN), Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), and European Marine Observation and Data Network (EMODnet), regarding key biological areas, habitats mapping, and coastal management. He also served

as the co-leader of Science and Evidence Task Team of World Coastal Forum, as well as a member of the Pool of Experts during the second and third cycles of the Regular Process.



Yutaka Michida

Member of the Group of Experts, Chairperson of the IOC-UNESCO, Atmosphere and Ocean Research Institute, University of Tokyo, Professor

The first Japanese national to Chair the IOC/UNESCO, Dr. Yutaka Michida is a distinguished professor at the University of Tokyo who has been actively involved in the field of oceanography for nearly 40 years. He has been recognised for his outstanding achievements and contributions to international marine science cooperation, including as recipient of the Japanese Prime Minister's "Promoting Japan as a maritime nation Award" and the "IOC/WESTPAC Outstanding Scientists Award" in 2015. Dr. Michida has played a crucial role in developing systems to warn and protect against tsunamis, and he has helped establish coordination systems in different parts of the world. In 2015, he was elected as a co-chair for the IOC/UNESCO International Oceanographic Data and information Exchange (IODE), the first person from an Asian country to hold this position. Dr. Michida has been dedicated to promoting cooperation among countries in the Western Pacific and nearby regions, and he has been influential in managing ocean data and information in Japan, through active involvement in the IOC/UNESCO Sub-commission for the Western Pacific and Adjacent Areas (WESTPAC). In Japan, he played a key role in the establishment of the Marine Information Clearing House (MICH) and Marine Cadastre.



Christine Gaebel

Deep-Ocean Stewardship Initiative; The University of

Christine Gaebel is an interdisciplinary researcher with a focus on the use of science and knowledge in international biodiversity governance processes, including the new Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable use of Marine Biological Diversity of Areas Beyond National Jurisdiction (the BBNJ Agreement). Christine Co-Leads the BBNJ Working Group for the Deep-Ocean Stewardship Initiative (DOSI) where she works with an international group of deep-sea researchers to help connect science and scientists with policy and decision-makers. She is currently undertaking a PhD at the University of Edinburgh and is a research assistant with the Nippon Foundation – University

Edinburgh, DOSI BBNJ Working
Group Co-Lead

of Edinburgh Ocean Voices Programme where she
researches science-society-policy interfaces in ocean
governance.

Segment 5: Regional deep dive 2: the South Pacific



Karen Evans

Joint Coordinator of the Group of Experts, Team Leader and principal research scientist with CSIRO

Dr Karen Evans is a Team Leader and principal research scientist with CSIRO and adjunct fellow with the Centre of Marine Socioecology at the University of Tasmania. Her research is focused on improving scientific understanding of the state of marine species and ecosystems and key threatening processes placing pressures on populations, particularly in relation to threatened, endangered and protected species. She delivers information and tools for supporting sustainable and effective management of marine industries, particularly in relation to national and international fisheries and offshore renewable energy. She is currently co-chair of the Global Ocean Observing System's Biology and Ecosystem expert Panel, joint coordinator of the third United Nations (UN) World Ocean Assessment and a member of the World Meteorological Organisation task team on climate and fisheries. She has published 1 book, 27 book chapters, over 60 peer-reviewed papers, over 60 reports and working papers and has guest edited a number of peer review journal issues. She is currently an associate editor of the Proceedings of the Royal Society B: Biological Sciences.



Alison Clausen

Deputy Global Coordinator of the UN Decade of Ocean Science for Sustainable Development, IOC-UNESCO

Alison Clausen is the Deputy Global Coordinator of the UN Decade of Ocean Science for Sustainable Development at IOC-UNESCO. She joined IOC as a programme specialist in 2019 with over twenty-five years' professional experience in program and project development and management in the areas of marine conservation, marine policy, and climate change adaptation. Before joining IOC she was based in Madagascar, where she worked throughout the Western Indian Ocean region for the World Bank and most recently as the Regional Director for the Madagascar and Western Indian Ocean program of the Wildlife Conservation Society. Prior to that she lived in Vietnam where she worked through South East Asia for a range of development banks, UN agencies and NGO partners.



Juana Susana Jimenez Alcantara
International Liaison Officer,
Flanders Marine Institute (VLIZ) as
NDC for Belgium and DIP

Juana Jimenez is a Peruvian marine scientist and a strong advocate for science-driven sustainable development. In her current position as International Liaison Officer at the Flanders Marine Institute (VLIZ) in Belgium, she focuses on finding and implementing synergies between local, regional, and international initiatives and policies. Such as the Ocean Decade, which has fostered and strengthened bilateral and triangular cooperation between her institute and partners in South America, the Caribbean and Africa. She is working in the Secretariat of the National Decade Committee for Belgium and in VLIZ's role as implementing partner of the Decade. She received her master's degree in marine and Lake Science and Management, an inter-university master's programme in Belgium from the University of Brussels, the U. of Ghent, and the U. of Antwerp in 2019.



Ian Butler
Australian Bureau of Agricultural
Resource Economics and Sciences,
Assistant Director - Fisheries
scientist

Ian Butler is a marine scientist and public servant currently working with the Australian government. He has over 35 years' experience working in research, science and policy fields in Australia, Papua New Guinea, Cambodia and the United States. Ian is a keen collaborator and communicator and his current work focusses on the translation of complex fisheries and climate change research to meet the needs of: policy areas of the government; the public; industry and indigenous groups. Ian is the lead editor for Australia's annual Fishery Status Reports and was a lead writer for the Tropical Coral Reefs chapter of the UN World Ocean Assessment II. Ian has a doctorate in coral reef ecology, has published in Nature and was a finalist for Australia's Eureka Science awards.



Dr. Fononga Vainga Mangisi-Mafileo is the Ocean Governance Coordinator for the Ocean7 Secretariat based at Tonga's Ministry of Meteorology Energy, Information, Disaster Management, Environment, Climate Change and Communications. Previously, she worked for 8 years at the Pacific Community – an intergovernmental science and technical organization governed by 26 member states. With the Geoscience, Energy and Maritime Division's GEF-funded global test case and regional programmatic

Fononga Vainga Mangisi-Mafileo

Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Ocean Governance Coordinator



Sebastian Herrera Kasic
Independent professional who works at the Chilean Maritime Authority, in charge of International Affairs

initiative Pacific Ridge to Reef Programme, which operated across 14 small island developing states, Inga lead their knowledge management and communications program of work. Inga has also served in senior technical advisory positions with donor-funded programs at the University of the South Pacific, the Australian Broadcasting Corporation (ABC) – International Development, the Australia New Zealand Banking Group Limited, and in the media. Inga graduated recently from James Cook University (Aust) with a post-graduate diploma in Ridge to Reef Sustainable Development, however she holds a PhD in Media and Governance from Keio University (Japan, 2010), a Master in Social and Informational Studies from Gunma University (Japan, 2006), and a Bachelor of Media Arts from Waikato Institute of Technology (NZ, 2000).

Chilean, Engineer in Maritime Administration, Master in Aquatic Resources Management, more Diplomas and international courses, highlighting those of the FAO Public Policy Training Center.

25 years of experience in public management at DIRECTEMAR, Chilean Maritime Authority. He currently works on international affairs for the Directorate of Maritime Interests and Aquatic Environment (of DIRECTEMAR), where the technical cooperation alliance with UNESCO/OREALC stands out to intervene in the curricular bases and modify the country's study plans, adding a subject of oceanic literacy throughout the school year, with the aim of creating the national oceanic culture from school.

In addition, since 2016 he has been a collaborator of the FAO, formalizing himself as an External Consultant as of this year, cooperating in publications on policies and safety in diving for small-scale fishing for Latin America.

Among his participations, the Nexus Science -Politics Symposium on Fisheries Sustainability stands out, held at the FAO headquarters in Rome in 2019, where he attended with his Master's Thesis and, currently, as an exhibitor at the next International Conference on Safety and Health of the Fisheries Industry (IFISH) that will take place at the FAO headquarters in Rome, in January 2024.

Segment 6: Regional deep dive 3: the Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and the Gulf of Aden, and the ROPME/RECOFI area



Rafael Gonzalez-Quiros

Member of the Group of Experts,
Director of the Oceanographic
Centre of Gijón

Director of the Oceanographic Centre of Gijón, one of the coastal laboratories of the Spanish Institute of Oceanography (IEO) – CSIC. In this institution he also has had other directive responsibilities as General Deputy Director for Research (2019-2020) and Head of the Marine Environment Area (2015-2019). He is also the Focal Point of Spain at IOC-UNESCO where he has attended as its representant to the General Assemblies and Executive Councils since 2015, and he was the representant of Spain at the Scientific Committee of the International Council for the Exploration of the Sea (2017-2021). His main scientific expertise is on the ecology of zooplankton and on the interactions between ecosystem dynamics and the variability of fish populations.



Justin Ahanhanzo

IOC-UNESCO Regional Liaison
Officer for Latin America, the
Caribbean, Asia, Pacific and
Africa

Justin Ahanhanzo, ocean, and fisheries scientist from Benin (West Africa) is the IOC-UNESCO Regional Liaison Officer for Latin America, the Caribbean, Asia, Pacific and Africa, with a broad professional experience in programme coordination in ocean sciences, space satellite remote sensing applications and operational oceanography. Justin is the initiator as the founding Coordinator of the Global Ocean Observing System in Africa (GOOS-AFRICA) and initiator and Team Leader of the UNESCO Intersectoral programme on the Applications of Satellite Remote Sensing for Ecosystems and Water Resources in Africa. He carried out research studies on the physics, dynamics, and mathematical modelling of the Indian Ocean. He is the acting Technical Secretary for the reactivation of the IOC Regional Committee for the Central Indian Ocean (IOCINDIO) leading to its successful transformation into an IOC Sub-Commission. Passionate with and committed to capacity development, Justin is the IOC Focal Point for UNESCO Chairs and the UNESCO Category 2 Centres in ocean sciences, policy and governance and represents the Director General of UNESCO in the Governing Boards.



Francesca Adrienne
Seychelles Observatory for
Research and Exploration
Institute, Founder

Ms. Adrienne is by profession a GIS Specialist with more than 20 years' experience in geographical and information science focussing on data and database management, spatial programming and cartography and map making. She has worked in different industries such as land and asset management, survey and cadastral, disaster and emergency management, fire safety, emergency rescue, and community safety. She was recently the Project Manager for United Nations Development Programme, managing the implementation of the JMA Demonstration Project strategies and objectives, while ensuring its effective management, through coordination with Project Steering Committee and other stakeholders, provision of top-quality advisory services and facilitation of knowledge building and management and making sure that the various components of the projects are properly being undertaken. In June 2023, together with other spatial scientists, oceanographer, and ocean scientists, she founded the Seychelles Hydrosatial Observatory for Research and Exploration Institute. This new NGO will be vital for the development of the hydrosatial domain in a small island states.



Razieh Gahoumi
Research Center for
Environment and Sustainable
Development, Department of
Environment, Iran

Razieh is an experienced professional with over 20 years of expertise in marine and coastal conservation across government, academia, and community sectors. Holding a PhD in Marine Biology, she currently serves as the Biodiversity Officer at Iran's Department of Environment, Research Center for Environment and Sustainable Development. Engaged in global initiatives, her focus lies in studying the social and ecological aspects of marine and coastal resources and conservation.

See segment 2.



Immaculate Sware Semesi

Marine Parks and Reserves Unit
(MPRU) Tanzania, MPRU
Manager

Segment 7: Regional deep dive 4: the North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea



Maria João Bebianno

Member of the Group of Experts

See segment 4.



Francesca Santoro

Ocean Literacy lead, IOC-UNESCO

Francesca Santoro works as Ocean Literacy lead at UNESCO's Intergovernmental Oceanographic Commission, where she coordinates ocean education activities in formal and non-formal contexts, and citizens engagement initiatives. She also coordinates the newly established Ocean Decade Coordination Office on Connecting People and the Ocean. She has a PhD in Analysis and Governance for Sustainable Development, and an MSc in Environmental Science and a Master Degree in Science Communication. Before joining UNESCO in 2011 she was lecturer at the University Ca' Foscari of Venice, and she collaborated with several research centres such as the Joint Research Centre of the European Commission and the Euro-Mediterranean Centre on Climate Change.



Iryna Makarenko

Iryna Makarenko, starting from December 2010, works at the Permanent Secretariat to the Commission on the Protection of Black Sea Against Pollution (Bucharest Convention), an international intergovernmental organization based in Istanbul, Turkey. In April, 2014 she got a position of Pollution Monitoring and Assessment Officer. Before moving to Turkey worked as a diplomat in the Mission of Ukraine to the European Union in Brussels being responsible for EU-Ukraine cooperation in the field of environment, transport, space, research and education; earlier as a Deputy Head of Office to Vice Prime Minister of Ukraine and as a diplomat of the Ministry for Foreign Affairs of Ukraine. She has a Master Degree in the field of Environmental and Energy Law

Permanent Secretariat of the Commission on the Protection of the Black Sea Against Pollution (Bucharest Convention), Pollution Monitoring and Assessment Officer



Anne Marie Cooper
International Council for the Exploration of the Sea (ICES), ICES Professional Officer for Fisheries and Aquaculture Advice

obtained at a Faculty of Law of the Catholic University of Leuven (Kingdom of Belgium), Certificates on Water Law (University of Dundee, Scotland), Environmental Diplomacy (University of Geneva, Switzerland) and Regional Economics (University of Genoa, Italy).

Anne Cooper shapes global sustainable fisheries and aquaculture policies and practices through her work at the science-policy interface at the international level. She is motivated by a deep commitment to improving people's lives and the health of aquatic ecosystems. Anne is the Professional Officer for Fisheries and Aquaculture Advice at the International Council for the Exploration of the Sea (ICES) in Copenhagen, Denmark. In this capacity, she leads ICES work on the development, testing, and use of methods to provide scientific advice on data-limited stocks of fish and shellfish in the Northeast Atlantic, representing more than 60% of ICES stocks. Anne also leads the development of the ICES advisory framework for sustainable aquaculture. Prior to working at ICES, she held positions advising high-ranking government officials on national fisheries, aquaculture, climate, and marine science policy in the US Senate, House of Representatives, and the National Oceanic and Atmospheric Administration (NOAA). Anne has a Ph.D. in Conservation Biology and Development Studies and Social Change Theory and a M.Sc. in Fisheries Science from the University of Minnesota.



Paul Snelgrove
Departmental Science Advisor to Fisheries and Oceans Canada

Dr. Paul Snelgrove is a University Research Professor of Ocean Sciences and Biology at Memorial University of Newfoundland in Canada. From 2008-2021 he led the (NSERC) Canadian Healthy Oceans Network, a national research network that developed new tools and approaches to support sustainable oceans. He currently plays the role of Associate Scientific Director of The Ocean Frontier Institute, which gathers researchers in Atlantic Canada and beyond to advance safe and sustainable ocean objectives. From 2003-2013, Dr. Snelgrove held a Canada Research Chair in Boreal and Cold Ocean Systems, following from an NSERC Industrial Chair in Fisheries Conservation. He led the synthesis of the International Census of Marine Life program, and was a member of the program's Scientific Steering Committee. His

and Memorial University
Professor

TED Global talk on that program as over 350,000 views. He frequently participates in workshops and conferences around the world as an invited speaker. In 2013, he was awarded the Timothy Parsons Medal for Excellence in Marine Sciences in Canada, and in 2020 was appointed Departmental Science Advisor to Fisheries and Oceans Canada. He has published ~150 journal articles, 30 book chapters and 2 books on his research on sustaining marine biodiversity and functioning in all three of Canada's oceans.



Christina Deligianni
Policy and Programs Director,
Institute for Sustainable
Development at European Public
Law Organization (EPLO)

Ms. Christina Deligianni, an EU Climate Pact Ambassador, is the Policy & Programs Director of the Institute for Sustainable Development at EPLO and the Managing Director of Verimpart that provides ESG assessment and training tools in sustainable finance. She has more than 20 years of professional experience in public policy, sustainability and business development in the public and private sectors. A linguist by training, she taught English as an adjunct professor (University of Chicago) and served as Chief of Staff for the Dean of the Hellenic Parliament. Since 2014, she has worked on international and European projects in new technologies, the blue economy, ESG and sustainability for entities that include the National Fund of Greece, the European Commission, FAO/GFCM, Pelagic Data Systems, Ominvest and the OMRAN Group. Currently, running three EU-funded research projects on blue economy, deep tech and climate change. A strong advocate for the blue economy, she has been instrumental in co-organizing two Blue Economy Fora for South-East Europe, and side events at the UN Ocean Summit along with an ESG assessment study on the Selvagens Islands. She holds an MA in the Humanities (University of Chicago, Fulbright Scholar), and a BA in English and Greek.

Segment 8: Regional deep dive 5: the South Atlantic (between the African and American coasts) and the wider Caribbean



Roberto Dantas de Pinho

Joint Coordinator, Representative of the Group of Experts, Senior STI Policy and Indicators expert with the Brazilian Ministry of Science, Technology and Innovation

Dr. Roberto de Pinho is a Senior STI Policy and Indicators expert with the Brazilian Ministry of Science, Technology and Innovation.

He serves as a member and Joint-Coordinator of the United Nations Group of Experts for the third cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (Regular Process). Additionally, he is a member of the Advisory Group of the OECD's International Survey of Science (ISSA) and holds the position of Vice-Chairperson of Sub-Commission for the Caribbean and Adjacent Regions of the IOC of the UNESCO (IOCARIBE). Formerly the Deputy Secretary at the Secretariat of Science, Technology, and Innovation, State of Bahia, Brazil, Dr. de Pinho led over 200 individuals in advancing STI policy for the state, which has a population of 15 million.

He earned his PhD in Computer Science and Computational Math from the University of São Paulo. His research covers diverse topics, including the international mobility of scientists, emergence of technologies, and the visual text mining of scientific articles. Dr. de Pinho was acknowledged as a contributor to the UNESCO Science Report and as a co-author of the Global Ocean Science Report.



Peter Pissierssens

Head of the IOC Project Office for IODE, Oostende, Belgium and IOC Capacity Development coordinator, IOC-UNESCO

Peter Pissierssens is the Head of the IOC Project Office for IODE, Oostende, Belgium and IOC Capacity Development coordinator. He has a background in marine biology and development cooperation. He joined UNESCO's Intergovernmental Oceanographic Commission (IOC) in 1989, dealing with marine data and information management, data management (IODE), bathymetry and tsunami warning and mitigation (Pacific region). The Oostende Office is the global headquarters of the OceanTeacher Global Academy, a training centre network for ocean data and information management, secretariat of the Ocean Biodiversity Information System (OBIS) and global node of the Ocean Data and Information System (ODIS). Since June 2023 the Office also hosts the UN

Decade Coordination Office for Data Sharing. The IODE network federates over 100 oceanographic data centres as well as marine libraries.



Ariel Hernan Troisi
Servicio de Hidrografía Naval,
Argentina, Technical Secretary

Oceanographer and MSc in Science and Technology Policy and Management. For more than three decades, he trained and developed as a professional throughout the whole ocean sciences value chain.

In the international arena, he has extensive experience in issues related to the Intergovernmental Oceanographic Commission (IOC) of UNESCO, having chaired programs and activities. Between 2015 and 2019, he was IOC Vice-chairperson for Latin America and the Caribbean and held the position of Chairperson of the IOC from 2019 until 2023. He had an active participation in the design, preparation, and implementation of the United Nations Decade of Ocean Science for Sustainable Development 2021-2030.

He has participated in various United Nations processes on behalf of the IOC. Currently serves as member of the Commission on the Limits of the Continental Shelf CLCS, as well as Technical Secretary at the Navy Hydrographic Office in Argentina.



Alexander Turra
Oceanographic Institute,
University of São Paulo, Professor

Turra is a Professor at the Oceanographic Institute of the Universidade de São Paulo and Coordinator of the Unesco Chair for Ocean Sustainability, based at the Oceanographic Institute and the Institute for Advanced Studies at the Universidade de São Paulo. Turra is a Biologist with a master's and doctorate in Ecology from the Universidade Estadual de Campinas. The activities focus on inter- and transdisciplinary science aiming at integrating ocean and society and science and decision-making, mainly on topics such as governance, integrated management and marine conservation, marine environmental impact, climate change, marine pollution (marine litter), and marine biodiversity.



Tricia Allison Lovell

Deputy Chief Fisheries Officer,
Antigua and Barbuda Fisheries
Division

Tricia Lovell (PhD) has over 20 years experience in fisheries management, marine conservation, and ocean governance and currently serves as the Deputy Chief Fisheries Officer in Antigua and Barbuda. She is a UN-Nippon Foundation Fellow and a recent graduate of the World Maritime University where she completed a PhD in Maritime Affairs. Her research focused on the governance of abandoned, lost and otherwise discarded fishing gear in Eastern Caribbean small-scale fisheries. Tricia has served as the Deputy Chair of Antigua and Barbuda's Ocean Governance Committee and is part of the maritime boundary negotiation team for Antigua and Barbuda. She has also served as Antigua and Barbuda's focal point to the Ramsar Convention and the Marine and Coastal focal point to the Convention on Biological Diversity. Tricia's interests include environmental education, marine and coastal conservation and environmental stewardship.



Rahanna Alicia Juman

Deputy Director Research,
Institute of Marine Affairs, Trinidad
and Tobago

Dr Rahanna Juman is the Deputy Director Research at the Institute of Marine Affairs. She holds a PhD in Zoology (2004) from the University of the West Indies, St Augustine, Trinidad and a Bachelor of Law (2015) from the University of London. Dr Juman has been conducting research on coastal ecosystems including mangrove forests and seagrass beds for the past 25 years, and has published in international peer review journals, and has authored two books on coastal wetlands. Dr Juman was a Hubert Humphrey fellow from 2010-2011, a Watson International Scholars of the Environment Fellow (2008), an American Fellow (2006) and a UNESCO/ L'OREAL Fellow (2002) and has done internship at the USEPA and NOAA in the United States. She chaired the Caribbean Sea Commission from 2021-2023 and is a member of the GESAMP Working Group 41 on Ocean Interventions for Climate Change Mitigation. Dr Juman has led efforts to develop and implement an Integrated Coastal Zone Management Policy Framework for Trinidad and Tobago and is leading efforts to implement Marine Spatial Planning.

Segment 9: science communication and ocean literacy



Vinicius Lindoso

Communications Officer, IOC-
UNESCO

Vinicius Lindoso works as Communications Officer at UNESCO's Intergovernmental Oceanographic Commission, where he coordinates digital and print communication projects to promote international scientific cooperation in the ocean sciences, and raise awareness around environmental protection. He has a Master's Degree in Public Policy from the University of Oxford's Blavatnik School of Government, and a double Bachelor Degree from Yale University in Global Affairs and French Studies. Vinicius is Brazilian by nationality, and has professional and academic background in conflict-resolution, working with civil society organizations in the Western Balkans on issues related to post-conflict education and state-building.



Rodrigo Thomé

Digital Influencer

I believe that my mission is to open a window that takes humanity closer to the ocean. Over the past centuries all the mysteries and lack of knowledge about this huge mass of water that forms our planet have driven, humanity away from the seas. Distant from the ocean, we have a hard time to love and protect not only the water itself but also the life that grows in there. My goal is to bring part of the ocean to the people, using audio visual and augmented reality content as well as campaigning and advocacy. Today, I am "on air" with EUceano, a 10-year project that follows the UN Ocean Decade to better understand, respect and protect the oceans. The project is a partnership with UNESCO and the Ocean Decade. I am also producing and starring in a series of videos in the UNESCO global social media channels called "Ocean Mondays", every week a short video about the ocean!



François Bailet

Senior Legal Officer, DOALOS

See segment 1.



Ronaldo Christofolletti

Co-Chair IOC OL Group of Experts; Co-Chair Ocean Decade Strategic Communications Group

Ronaldo is Professor at the Federal University of São Paulo, Brazil. He integrates his research on climate change and biodiversity in the intertidal ecosystems with science communication and ocean literacy. Therefore, by both producing science and fostering the science dissemination, Ronaldo has been publishing in high impact scientific journals and communicating ocean science in newspapers, radio, magazines and internet contents from local to international media. He is the coordinator of the awarded project "Tide of Science" that co-produces science with policy makers, civil society, journalists, holders of the traditional and indigenous knowledge and the private sector. Ronaldo is Chair of the IOC UNESCO Group of Experts on Ocean Literacy, co-chair of the Strategic Communications Group of the UN Ocean Decade, member of the Pool of Experts for the UN Regular Process and coordinator of the All-Atlantic Blue Schools Network.



Francesca Santoro

Ocean Literacy lead, IOC-UNESCO

See segment 7.



Natasha Berg
Ocean Communicator

Natasha Berg is an acclaimed strategist and communications expert who, over the last decade, has been pivotal in building the modern landscape of environmental communications and impact marketing. Natasha's pioneering experience in the sector includes co-creating Musings, the first-ever magazine on sustainable innovation with philanthropist Susan Rockefeller, serving as Director of Brand Strategy and Partnerships for the world's first and largest zero waste lifestyle store, Package Free, guiding the positioning of the first-ever plastic free standard for Business Operations, the Blue Standard. As an independent Consultant to the United Nations, Natasha led the development and execution of the foundational Outreach and Engagement Strategy for the UN World Ocean Assessment. She has also executed on global communications for United Nations World Oceans Day since 2019. In response to an increase of both interest and greenwashing in the realm of sustainability, Natasha launched the boutique consultancy Tru Story in 2020. Natasha is a Founding Board member of international nonprofit Oceanic Global where she has led on brand strategy and cause marketing for the NGO and its various corporate partners since inception. She has also served on the board of UNICEF Next Gen and advised on the organization's climate programming since 2015.

Segment 10: Ocean Decade



Julian Barbieri

Head, Marine Policy and Regional Implementation Section, IOC-UNESCO

See segment 2.



Karen Evans

Joint Coordinator of the Group of Experts, Team Leader and principal research scientist with CSIRO

See segment 5.



Stephen Widdicombe

Plymouth Marine Laboratory,
Director of Science

Professor Steve Widdicombe is a marine ecologist with over 30 years of experience in issues relating to marine ecology, climate change, biodiversity and ecosystem function. Steve is currently the Co-Chair of the Global Ocean Acidification Observing Network (GOA-ON) Executive Council, a collaborative international network with around 1,000 scientists from more than 100 countries. GOA-ON's goals are to detect, understand and forecast the drivers and impacts of ocean acidification. Steve represented the GOA-ON on OSPAR's Intersessional Correspondence Group on ocean acidification and was an author of the ocean acidification chapter in the 2023 Quality Status Report. Steve co-leads the UN Ocean Decade endorsed programme 'Ocean Acidification Research for Sustainability'

(OARS), which aims to provide society with the observational and scientific evidence needed to sustainably identify, monitor, mitigate and adapt to ocean acidification; from local to global scales. Steve regularly contributes to UNFCCC and CBD COP side events and was moderator of a 2022 UN Ocean Conference Dialogue. He is a member of the UN Convention for Biological Diversity (CBD) ad-hoc Technical Expert Group on Indicators for the Kunming-Montreal Global Biodiversity Framework, the UN Ocean Decade Conference (2024) Programme Committee and the UN 3rd World Ocean Assessment Pool of Experts.



Jean Aude
Alcatel Submarine Networks,
Marine Development Manager

Currently Marine Development Manager for Alcatel Submarine Networks. Main activity includes being Marine expert and technical support for Marine operations. With a small group of expert in ASN, we are assisting the company and the industry to build and implement new tools, techniques for profitability and efficiency, and also to improve safety and sustainability throughout our activity. My background includes a long offshore experience on Survey and Cable ships, as trained Hydrographer / Survey team leader & Cable engineer. I have a Master in Business and Administration (from French IAE Caen), and recently certified as PMP (Project Manager Professional). Recent professional engagement, includes joining UNESCO/IOC 'Corporate Data Group' for ASN as part of the Ocean Decade efforts to assist in getting the 'Science we need, for the Ocean we want'. Which has been a fantastic opportunity to continue moving collectively on this topic, exchange with scientists and other industries, and participate to the global efforts to preserve our planet Oceans, especially in the context of global warming.



François Marcel Auguste Houllier
IFREMER, President & CEO

François Houllier has been President and CEO of IFREMER, the French Institute dedicated to Marine Science and Technology, since September 2018. A pioneer in ocean science, IFREMER's cutting-edge research is grounded in sustainable development and open science. A graduate of Ecole Polytechnique and a Doctor in Forest Biometrics, François Houllier was the Director of the French Institute of Pondicherry (India, 1994-97). He then joined the French Institute for Agricultural Research (INRA) where he held various management positions before being appointed as President and CEO in July 2012. During his time at INRA, he authored three reports to the French Government, on Citizen Sciences (2016) and on Research and Innovation in Agriculture (2015) and in the Forest sector (2016), that were translated into public research policies. From September 2016 to September 2018, François Houllier chaired Université Sorbonne Paris Cité (USPC), the largest cluster of universities in Paris. During his time at USPC, he successfully directed an Excellence Initiative, which was selected by the French Government in March 2018 and later led to the creation of Université Paris Cité, one of the French leading universities.



Lorna Inniss
Focus on Caribbean CD activities and Decade Tropical Americas Task Force, IOC UNESCO

Lorna Inniss is the Regional Coordinator of IOC-UNESCO Subcommission for the Caribbean and Adjacent Regions (IOCARIBE). Previously, she was the Coordinator of the Cartagena Convention and Acting Director of the Coastal Zone Management Unit, Barbados. She was one of two Coordinators of the Group of Experts to deliver the First World Ocean Assessment. She was one of several architects of the Caribbean Tsunami and Coastal Hazards Warning System. She helped develop, and lectured in, the M.Sc. and Post-Graduate Diploma programmes in Coastal Engineering and Management at the University of the West Indies, St Augustine, Trinidad and Tobago. Her work spans the three ocean regions of SIDS – Caribbean, Indian and Pacific, and she has trained and provided technical advice to several continental coastal countries.



Zaki Mubarok

Legal Department of Ministry of Marine Affairs and Fisheries, Research Fellow of Center for Sustainable Ocean Policy of Indonesia University

I am a research fellow of Center for Ocean Sustainable Policy, University of Indonesia and work for Legal Department of the Ministry of Marine Affairs and Fisheries of Indonesia as Coordinator for Treaties and International Law.

I hold a doctoral degree from Australian National Center for Ocean Resources and Security (ANCORS), University of Wollongong and UN Nippon Fellowship alumnus at UNDOALOS and Nelson Mandela University.

As a civil servant to the Ministry, I am delegate or representative to the bilateral and multilateral meetings such as World Ocean Assessment (WOA), BBNJ, Port State Measures Agreement, RFMO, COFI, and WTO on Fisheries Subsidies. The presentations I delivered relate to issues on ocean affairs in general, IUU fishing, fisheries crimes, BBNJ, Indo-Pacific, maritime security, environmental law, UNCLOS, and RFMO. I had an experience as consultants on IUU Fishing and a contributor to various journal articles, newspapers, and magazine on ocean affairs and fisheries.

Segment 11: Closing



Vladimir Ryabinin

Executive Secretary, IOC-UNESCO

See segment 1.



Kimberly Louis

Co-Chair of the Ad Hoc Working Group of the Whole on the Regular Process

See Segment 1.



See segment 1.

Francois Bailet
Senior Legal Officer, DOALOS



See segment 3.

Marco Boccia
Programme Management Officer
and Technical Lead of the
Regular Process secretariat