Summary of discussions of the third regional Workshop of the first round of workshops held under the auspices of the United Nations in support of the second cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects

Camboriú, Brazil, 14-15 November 2017

I. Overview

The present document provides a summary of the discussions and information emanating from the third regional Workshop of the first round of workshops in support of the second cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (Regular Process), covering the region of the South Atlantic (between the African and American coasts) and the Wider Caribbean. The Workshop was held in Balneário Camboriú, Brazil, from 14 to 15 November 2017.

The information provided in the present summary synthesizes the discussions, presentations, as well as the remarks of the Co-Chairs of the Workshop under the following overarching topics: review of available and proposed assessments and sources of information; possible structure of the second world ocean assessment; priorities in the region of the Workshop; how to make the second world ocean assessment most helpful to policy-makers in the region, including with respect to the implementation of the United Nations 2030 Agenda for Sustainable Development (2030 Agenda); supporting contributions to the preparation of the second world ocean assessment; capacity-building needs and opportunities, including for the conduct and improvement of integrated assessments; and improving the information available for the second world ocean assessment and future assessments. The annexes to the present summary of discussions provide the agenda, the list of participants and a comparison between the structure of World Ocean Assessment I and II.

II. Background

The programme of work for the period 2017-2020 for the second cycle of the Regular Process, developed by the Ad Hoc Working Group of the Whole on the Regular Process[1] and endorsed by the General Assembly,[2] includes in the activities for 2017 the holding of regional workshops to support the development of the assessment and facilitate outreach, awareness-raising and capacity-building, through, *inter alia*, the identification and collection of data, the identification/scoping of regional priorities and the wider dissemination of the First Global Integrated Marine Assessment – World Ocean Assessment I (WOA I or the Assessment).[3] The workshops will also foster a wider geographical representation in the appointment of experts to the pool of experts. Subsequently, the Group of Experts of the Regular Process developed the "Guidelines for the first round of Workshops in 2017 to Assist the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects" for the first round of regional workshops. The Guidelines provide for, *inter alia*, the purpose, objectives, participants and outputs of the workshops, as well as for the various operational and administrative considerations on their implementation.

In accordance with the Guidelines, the objectives of the first round of workshops are to:

(a) Provide an opportunity to present the main conclusions of the First Global Integrated Marine Assessment – World Ocean Assessment I;

(b) Enable participants to put forward their views on the scope and structure that should be adopted for the assessment to be prepared in the second cycle of the Regular Process, which

[1] See the attachment to A/71/362.
[2] See General Assembly resolution 71/257, paragraph 299.
[3] See paragraph 8 (h) of the Programme of Work 2017-2020, attachment to A/71/362.

is to be completed by the end of 2020. Given that the General Assembly decided that the first cycle of the Regular Process should focus on establishing a baseline, and that subsequent cycles should extend to establishing trends, the workshops should, in particular, aim to conclude:

(i) What aspects of the ocean are most relevant to include in the assessment to be made in the second cycle, and the extent to which it is possible to establish trends in relation to them;

(ii) How the establishment of such trends can most effectively be done in the different oceanic regions in a standard manner;

(iii) How the existence of trends can, in the future, be evaluated;

(iv) How risks in relation to the various aspects of the ocean can be evaluated, taking into account regional interests and differences; and

(v) What regional priorities should be addressed in the preparation of the assessment of the second cycle, bearing in mind the global ocean policy agenda;

(c) Promote capacity-building within the region for which each workshop is held, so as to assist in creating the abilities to contribute from the region to the production of the assessment. In particular, the workshops should consider what steps might be taken to improve abilities to carry out integrated assessments within the region;

(d) Explore what increased cooperation or coordination between processes already under way in the region could assist in providing the information required for the assessment;

(e) Consider how assessments produced by the Regular Process can be structured so as to help policy-makers most effectively with their tasks; and

(f) Consider how to improve arrangements for networking between experts and organizations taking part in each workshop, and the Co-Chairs of the Ad Hoc Working Group of the Whole, the Bureau of the Ad Hoc Working Group of the Whole, the Group of Experts, the Pool of Experts, the National Focal Points and the secretariat of the Regular Process.

III. Conduct of the Workshop

The Workshop was held under the auspices of the United Nations, represented by the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs, which also serves as the secretariat for the Regular Process, and hosted by the Government of Brazil with the support of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization through its Regional Secretariat for the Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE).

The Workshop was co-chaired by Ms. Beatrice Padovani of Brazil (member of the Group of Experts of the first cycle of the Regular Process) and Mr. Renison Ruwa of Kenya (Joint Coordinator of the Group of Experts of the Regular Process). It was attended by representatives from Governments of Angola, Argentina, Bahamas, Belgium, Benin, Brazil, Cameroon, Colombia, Dominican Republic, Gambia, Ghana, Guinea, Jamaica, Kenya, Mali, Mauritania, Mexico, The Netherlands, Norway, Togo, and Uruguay and by representatives from intergovernmental organizations. The United Nations was represented by the Secretary of the Ad Hoc Working Group of the Whole on the Regular Process and by the Programme Officer of the secretariat of the Regular Process. The workshop was attended by thirty-eight participants, thirteen of whom were female. The list of participants can be found in Annex 1.

The Workshop was opened by the Co-Chairs, and welcoming remarks were delivered by the representatives of the secretariat of the Regular Process on behalf of the United Nations, by Mr. Cesar Toro on behalf of IOCARIBE, and by Mr. Andrei Polejack (Ministry of Science, Technology, Innovation and Communication) on behalf of the host country. Summaries of these presentations, as well as those outlined below, are provided in the following section

(Section IV "Summary of discussions"), and presentations made available for distribution will be posted on the Regular Process homepage (www.un.org/depts/los/rp) in due course.

Following these remarks, the secretariat of the Regular Process gave a presentation on current developments in global ocean policies as well as on the Regular Process. This was followed by a presentation on the "Assessment of Assessments" (2006-2009) by Mr. Peter Harris (member of the Group of Experts of the first cycle of the Regular Process). Ms. Beatrice Padovani (Co-Chair of the Workshop and member of the Group of Experts of the first cycle of the Regular Process) and Mr. Enrique Marschoff (member of the Group of Experts of the first and second cycle of the Regular Process) subsequently provided an analysis of the First WOA I, and Mr. Renison Ruwa (Co-Chair of the Workshop and Joint Coordinator of the Group of Experts) provided an overview of the structure of WOA I and presented on the draft elements for discussion on the scope and structure of the assessment of the second cycle (draft elements).

These presentations were followed by a number of interventions and presentations by participants under the agenda item on the review of assessments carried out since 2012/to be carried out between 2017 to 2020 in order to identify how the assessment under the Regular Process can best build on them; and by discussions in break-out groups on the possible structure of the assessment of the second cycle; regional priorities for consideration in the preparation of the second world ocean assessment; and on how to make the assessment of the second cycle more helpful to policy-makers in the region, including with respect to the implementation of the 2030 Agenda.

Subsequent discussions in plenary focused on possible steps which may be undertaken within the region to support contributions to the WOA II; on the capacity-building needs and opportunities relevant to the science-policy interface and how the activities undertaken during the second cycle of the Regular Process may contribute to this end; on how capacities to achieve integrated assessments of the marine environment can be improved; and on what steps could be taken, either within the region or at a global level to improve the information available for the assessment of the second cycle, and to improve the information available for the second world ocean assessment and future assessments.

The Workshop concluded with the Co-Chairs' summary of the main elements that emerged from the Workshop, followed by their closing remarks. Representatives of the secretariat of the Regular Process, IOCARIBE and the host country also made closing remarks.

IV. Summary of discussions

A. The main recommendations emanating from the Workshop are as follows:

1. Participants expressed great concern with the proposed possible structure of the second world ocean assessment (WOA II):

    a) The logic behind the proposed new structure is not clear as it was in the WOA I structure, which was more clearly based on the Driver-Pressure-State-Impacts-Response (DPSIR) framework;

    b) If the second world ocean assessment is to capture trends and changes, the same structure should be maintained with data analysed in different ways, for instance standardizing presentation of trends in graphics and figures;

    c) Also, it is not clear how regional and sub-regional trends will be presented;

    d) Habitats and biodiversity are not adequately covered, in particular some very important habitats, such as coral reefs;

    e) The WOA II structure should have a more clear relationship with the 2030 Agenda especially, but not limited to, Sustainable Development Goal 14 (SDG 14);

f) Carbon sequestration and invasive species are themes that should be present in WOA II;

g) The present structure seems to miss focus on environmental aspects and the link with socioeconomic aspects.

2. WOA II should stimulate governments to incorporate and empower the academic institutions (local, regional and abroad) and the ways they may collaborate, including, for example with respect to the transfer of technology, capacity-building, data provision and scenario setting;

3. Integration with already existing initiatives, protocols and conventions at the local and global levels should be stimulated;

4. WOA II should also report on initiatives that demonstrate actions/tools that have positive impacts, i.e., good practices;

5. There should be a balance between science and policy, so that both support each other. Although policy recommendations are not expected from the second cycle, the output should be clearly policy-relevant;

6. WOA II should consider Local Ecological/Indigenous Knowledge as sources of information;

7. Gaps identified in the WOA I should be tracked and assessed in order to clarify their relevance for inclusion in WOA II. There should be a clear link that demonstrates whether and how previously identified gaps have been addressed in order to identify trends in the second cycle. In this regard, the creation of a real-time monitoring of gaps was suggested;

8. WOA II should consider adaptation to climate change, considering ecosystem-based adaptation (EBA) related to different scenarios and possible impacts caused by extreme weather events, which may cause demographic consequences. The occurrence of extreme events was a particular concern in the region, especially after the severity of the 2017 hurricane season in the Caribbean;

9. Concern was expressed regarding the data/assessments repository (old Gramed);

10. Consultations with representatives from independent non-governmental organizations (NGOs) who are implementing citizen-science programmes are encouraged so as to consider the perspectives of civil society and other stakeholders;

11. Capacity-building is much needed, especially on how to conduct integrated assessments, data collection, standardization, interoperability and analysis; citizen science approaches; and for officials, policy-makers, and technical staff working in the science-policy interface and who may also be contributing to the Regular Process; and

12. There was some concern expressed regarding issues such as transport of radioactive material and the exploration of deep-sea resources and the potential impact of these activities on marine biodiversity.

B. Opening remarks and welcome addresses[4]

Ms. Beatrice Padovani (Co-Chair) welcomed the participants and emphasized the importance of the Regular Process and of its second cycle, as well as the role of the South Atlantic and Wider Caribbean Workshop.

Mr. Renison Ruwa (Co-Chair) emphasized the importance of the Workshop in capturing the

[4] Presentations made available for distribution will be posted on the Regular Process homepage (www.un.org/depts/los/rp) in due course.

contributions of the States of the region beyond those which will be provided by members of the Pool of Experts. He also recalled the importance of achieving a sustainable future, thus the need to change the cycle of degradation of the ocean.

Mr. Francois Bailet (UN/DOALOS) welcomed participants and acknowledged the kind offer of the Brazilian government to host the Workshop (Ministry of Foreign Affairs – MRE; and the Ministry of Science, Technology, Innovation and Communication – MCTIC). He also acknowledged the contribution of the members of the Group of Experts and of the Pool of Experts. He indicated that the Programme of work for the second cycle of the Regular Process (2017-2020) included the holding of two rounds of regional workshops, which will support, the preparation of the second world ocean assessment, and contribute to capacity-building, especially regarding the science-policy interface.

Mr. Cesar Toro (IOCARIBE) presented the role of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) in the Regular Process and the challenges of the oceans and the planet, such as climate changes and exploitation of resources. He emphasized the importance of the oceans to Earth sustainability and the need to work to promote it, facing the new challenges using the best available science to take the best decisions to achieve a new level of science citizenship. He recalled the importance of considering the socioeconomic aspects in seeking the objectives of the Regular Process. The importance of the Workshop to capture the regional view of South Atlantic and Wider Caribbean in the Regular Process was also emphasized.

Mr. Andrei Polejack (MCTIC, Brazil) welcomed all participants on behalf of the host country, and indicated that the workshops of the second cycle of the Regular Process are smaller in number but broader in geographical scope as compared to these held during the first cycle of the Regular Process. He further indicated that the challenge is bigger and that all are welcome to collaborate with inputs of local and regional views. He wished a pleasant work for all and assured the commitment by the Government of Brazil in supporting the workshop, also thanking the Ministry of External Relations for its work to make this possible.

C. Adoption of agenda for the Workshop and designation of a rapporteur

The agenda (Annex 2) was agreed after small adjustments and Mr. Alexander Turra, Oceanographic Institute of São Paulo University, was nominated as rapporteur.

D. Presentation on current developments in global ocean policies and on the Regular Process

Mr. Francois Bailet (UN/DOALOS) introduced recent developments and stressed the importance of the link between science and policy, especially in the context of the oceans, considering the existing and new activities and pressures, as well as the 2030 Agenda (especially Sustainable Development Goal 14). He emphasized the role of science in supporting decisions and in evaluating progress, including most recently by the outcome document of the United Nations summit for the adoption of the post-2015 development agenda, “Transforming our world: the 2030 Agenda for Sustainable Development”, and the Sustainable Development Goals (“SDGs”) and targets. Mr. Bailet emphasized the need for reinforced capacity-building in ocean affairs and the law of the sea, including with respect to the science-policy interface. He also indicated the importance of the need to promote integration between scientific areas. He further indicated that the Regular Process is designed to support decision-making, and noted the proposed United Nations Decade of Ocean Science for Sustainable Development (2021-2030), which could serve to further promote and reinforce the science-policy interface. He also recalled that the Workshop will also identify means to contribute to the Regular Process.

E. Presentation on current developments in global ocean policies and on the Regular Process

Ms. Vita Onwuasoanya (UN/DOALOS) that the Workshop was to provide opportunity for exchanges and discussions, and introduced the background of the Regular Process and its current stage. She emphasized that the Regular Process is a continuous process and informed that all its history is recorded in the DOALOS website. She mentioned that the first cycle of the Regular Process produced the First Global Integrated Assessment of the Oceans (World Ocean Assessment I) and that the task of the second cycle is to build on the first cycle in a continued way, with two main outputs: 1) World Ocean Assessment II by 2020; and 2) Synthesize and translate the WOA I for policy-makers through the elaboration of three technical abstracts (Technical Abstract of the First Global Integrated Marine Assessment on the Ocean and the Sustainable Development Goals under the 2030 Agenda for Sustainable Development; Technical Abstract of the First Global Integrated Marine Assessment on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction; and Technical Abstract of the First Global Integrated Marine Assessment on the Impacts of Climate Change and Related Changes in the Atmosphere on the Oceans). She informed that the second cycle will consider improvements in capacity-building efforts.

F. Presentation on the First Global Integrated Marine Assessment – World Ocean Assessment I, and discussion of the strengths and weaknesses of the Assessment

Assessment of Assessments 2006-2009 – a critical appraisal

Peter Harris (member of the Group of Experts of the first cycle of the Regular Process) presented on the "Assessment of Assessments" report (2009), and on the DPSIR framework and the rationale for an "integrated" assessment. He provided examples of regional and global assessments, as well as commented on various states and trends identified in WOA I. Following the presentation, participants were given the floor and provided general comments, as follows:

- The improvement and incorporation of science in decision-making is patchy and not a general achievement;
- Mention of concern regarding (ir)responsible consumption of natural resources, exemplifying that seabed mining (theme captured by the WOA I) can be more impacting to the biodiversity than other activities but is being authorized by the International Seabed Authority (ISA) despite the lack of knowledge on its impacts and consensus on its safety;
- The three Technical Abstracts should be more widely distributed and publicized;
- The impact of non-declared fisheries should be emphasized;
- Transboundary aspects of decision-making is a complex issue but needs to be improved considering regional arrangements;
- Assessments are not supposed to be policy prescriptive but are expected to be useful to policy-makers, which demand the approximation between science and policy making, as well as capacity-building to allow policy-makers to incorporate science into decision making;
- Integration and how to share benefits are challenges that still need to be overcome;
- Regional workshops publicized a large amount of valuable regional-level information and data, but these were not widely taken into account by WOA I;
- The workshops were initiated well before the Pool of Experts was in place and there were no effective links between the Pool of Experts and the workshops, which diminished the effectiveness of the workshops;

- There should be an early round of regional workshops, which should involve the members of the Pool of Experts and enable dialogue and effective participation;
- Need for a mechanism for scoping regional priorities, which has potential for wider dissemination;
- Lack of resources, which also limited the number of meetings;
- Slow set-up of website;
- Problems with Pool of Experts, as the lack of support for meetings of writing teams;
- Processes for conducting regional assessments not fully documented;
- Non-living resources not included in "Assessment of Assessment" (AoA) report (as the large marine industries such as offshore oil and gas);
- Several issues were not properly covered by regular supra-regional assessments, including: social and economic changes, habitat changes and broader ecosystem changes;
- In spite of the Millennium Ecosystem Assessment (MA), the Global International Waters Assessment (GIWA), the Large Marine Ecosystems (LME) project, WOA I, and others, there are still major gaps in global knowledge of environmental condition and trends;
- No National Focal Points for the first cycle of the Regular Process or the AoA; and

Short timeline for the preparation of WOA I and no separate peer review process.

The First World Ocean Assessment (WOA I)

Ms. Beatrice Padovani (member of the Group of Experts of the first cycle of the Regular Process) and Mr. Enrique Marschoff (member of the Group of Experts for the first and second cycle of the Regular Process) presented an analysis of the WOA I focusing on the importance of having a Regular Process and how it has been organized, what were the main conclusions and what were the knowledge and capacity-building gaps that had been identified. The participants provided the following general comments and questions:

- Gaps in reporting with respect to fisheries, particularly artisanal fisheries;
- How to deal with specificities within regions in the WOA II?
- How to cope with synergies and bring all impacts together into a policy scheme?
- One improvement is that the future of the WOA seems now to be more in the hands of Member States;
- Need to understand and cope with the challenges presented in the first cycle in the preparation of WOA II;
- Need to consider how to provide meaningful recommendations for policy-makers without addressing at spatial/political/ecological subdivisions;
- Importance of critical analysis of WOA II implementation, its difficulties and lack of resources, and how to improve in the second cycle;
- WOA I was clear and strong in presenting the impacts of human activities (e.g., trawling and mining) on the deep ocean;
- 2020 is a very interesting year to launch WOA II due to political processes and international negotiations, such as the proposed Intergovernmental conference on an international legally binding instrument 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 (BBNJ Process);

- The importance of crosscutting issues, and reinforcing the understanding of decision-makers in this regard.

Presentation by a Joint Coordinator of the Group of Experts of the Regular Process of a document on the possible structure of the assessment or assessments to be prepared under the Regular Process in the second cycle, running until the end of 2020

Mr. Renison Ruwa indicated that the the Workshop aimed to allow regions to collaborate in the definition of the structure of the WOA II[5], considering WOA I as a baseline. He emphasized that WOA II will extend to evaluating trends and identifying gaps (2016-2020), both in global, regional and sub-regional perspectives. He also emphasized the responsibility of not taking actions and the need of the regional/local actors to take the lead in discussing and implementing the recommendations of WOA II. Mr. Ruwa recalled that the general idea of the WOA II is to identify trends and developments since WOA I, including those which occurred in each of the regions. He informed that the WOA II is limited in the capacity to implement actions and promote changes, thus needing the engagement of policy-makers from the different regions, which can count on the support of their local experts to promote the needed changes. WOA II could suggest how to do the changes and, in this way, capacity-building becomes a central action to allow regional and local assessments to support regional and local actions. The participants provided general comments and questions on the proposed structure of the WOA II as follows:

- Need to fill the gaps first;
- As there is a chapter/topic on primary production, there should be one on secondary production;
- Broaden discussions with the International Seabed Authority (ISA) in order to exchange information on its advancement in the discussion and regulation (protocols) on deep-sea mining;
- Ecosystem services do not cover all benefits relevant to society;
- In the possible structure, habitats and biodiversity are not adequately covered, in particular some very important habitats are not included such as coral reefs, which are under intense pressure at the moment and at the centre of the climate crisis;
- Need to evaluate the risks of earthquakes and tsunamis in the South Atlantic;
- The logic behind the possible structure is not clear as it was in the previous WOA I, which was more clearly based on the DPSIR framework. There were several comments on this issue, denoting the advantages of changing of the WOA I structure;
- The logic of WOA II is to capture trends and changes, so the same structure should be maintained with data analysed in different ways, for instance standardize presentation of trends in graphics and figures;
- An example of an evident gap is how to evaluate what good water quality means;
- WOA II needs to highlight best practices and provide advice to prevent pollution;
- WOA II should institutionalize reporting mechanisms, so that local outlines may be compatible with regional or global outlines thereby allowing for cross-region compatibilities;

[5] *http://www.un.org/depts/los/global_reporting/9th_adhoc_2017/Elements_for_discussion_on_the_scope_and_structure_of_the_assessment.pdf*

- Consideration should be given to whether WOA II will evaluate effectiveness of public policies;
- WOA II should also report on initiatives that demonstrate actions/tools that have positive impacts, i.e., good practices;
- WOA II structure should have a clearer relationship with the 2030 Agenda, in particular, but not limited to, SDG 14;
- WOA II should make climate change effects on ecosystem services more evident in its structure;
- Parts 4.4 (Area-based management tools) / 4.13 (Marine debris, including nanoplastics) / 4.15 (Cultural links to the seas) in Coastal and Shelf Seas section should also apply to the Open Ocean section;
- The need for a crosscutting approach in the WOA II was emphasized; and
- Include the importance of outreach and education (ocean literacy) in the structure.

G. Review of assessments that have been carried out in the South Atlantic and Wider Caribbean since 2012 and that are proposed to be carried out within the region in the period 2017 – 2020, in order to identify how the assessment(s) under the Regular Process can best build on them

Main outcomes of the South Atlantic Workshop of the first cycle of the WOA, Abidjan, Côte d'Ivoire

Mr. Alexander Turra presented the elaboration process of the WOA I in the South Atlantic, as well as the efforts to conduct an assessment in the southwestern Atlantic (Argentina, Brazil, and Uruguay). He introduced the main outcomes of the South Atlantic Workshop, which focused mainly on identifying the information gaps in the region and informed that the full report is available on the DOALOS webpage[6].

Institutionalizing a reporting mechanism on the State of the Marine Environment and associated Economies for the CLME+ region

Mr. Patrick Debels introduced the theme of transboundary collaboration exemplifying the bodies/mechanisms that should be engaged, e.g. FAO Fisheries Areas, regional fishery bodies/regional fishery management organizations (RFBs/RFMOs), Regional Seas and IOC Regional Sub-commissions. He further presented the Caribbean Large Marine Ecosystem (CLME) project as an example of multiple-scale integrated initiative to integrate science and policy. Mr Debels mentioned that the reports of WOA II should be institutionalized and internalized by policy-makers. He recalled WOA II should promote an institutionalized, integrated, well-coordinated long-term regular approach based on ecosystems. He supported a governance structure with a more holistic reporting mechanism that integrates different spatial scales, as a multi-level, nested regional governance framework, based on harvesting commonalties among countries.

Marine Biodiversity Assessments - OBIS, BPBES and Sisbiota/FAPESP

Mr. Antonio Carlos Marques noted the importance of biodiversity records, as the Ocean Biodiversity Information System (OBIS) to support policy making. He highlighted the lack of information in the South Atlantic and the relevance of field campaigns to improve and increase the records. He recalled that the data is used in several ways, from scientific

[6] http://undocs.org/A/68/766

publications to assessments, such as the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Mr Marques indicated that OBIS is working with the Global Ocean Observation System (GOOS) and the Marine Biodiversity Observation Network (MBON). The many deep-sea gaps in biodiversity records were emphasized.

Status of the Ghanaian marine and coastal ecosystem

Ms. Hawa Bint Yaqub presented some evidence of changes in temperature, salinity, upwelling (weakening), dissolved oxygen, zooplankton volume, fish production, algal blooms, coastal pollution in the Ghanaian marine and coastal ecosystem. She informed of the existence of some regional monitoring programmes and concluded that coastal and marine ecosystems issues are still inadequately represented or mainstreamed into national development plans and policies; that there are also limitations in the coordination between national and international efforts, as well as the lack of current accurate information on the issues at stake. The holistic approach was needed in the management and protection of the marine and coastal ecosystems so that their resilience and health are not compromised.

Coral Reef Conservation

Ms. Nohora Galvis mentioned several anthropogenic disturbances on uninhabited and inhabited reefs. She presented data on the condition and conservation of coral reefs, as well as assessments conducted using different strategies (from multi-criteria evaluation to citizen science) and aspects/indicators (from pollution to invasive species). Examples of economic valuation efforts to emphasize the importance of health of coral reefs were provided. Ms Galvis presented the following recommendations: plan effective coral reefs protection by acknowledging the declines due to climate change and widespread human development impacts; establish Marine Protected Areas (MPAs) with concomitant regional or global planning and regulations for effective conservation strategy in the face of these stressors; and empower MPAs to regulate sustainable use of local artisanal fisheries, including diving operators. She mentioned the following SDG 14 challenges: avoid unsustainable development on coral reefs; avoid justification with fake promises of coral reef restoration without stopping local threats; scale-up restoration efforts to meaningful ecological, social and economic scales, ensuring restored ecosystems are resilient to anthropogenic climate change; and avoid breaking endangered coral species, which is another threat to healthy coral, particularly when restoration projects may not be as effective as expected.

Assessment of major ecosystem services from the marine environment - the case of Cameroon

Ms. Eline Bassey Dimithe Bang indicated that Cameroon has a central position in the Gulf of Guinea and that the main human economic activities are fisheries and hydrocarbon exploration. She mentioned that waste management and marine litter are local problems. She recalled that the lack of sustainable education is related to the negative attitude of society to the environment, which is also linked to poverty. Ms Bassey Dimithe Bang concluded that: the lack of sustainable education is also a contributing factor to the population's negative attitude to the environment; efforts by the government to stop these are not sufficient because of poverty and to some extent very porous administration. The Secretariat of the Environment Assessment in Central Africa could play a leading role in assisting countries in the region to meet specific targets. The major challenge for countries in the sub-region is the fact that funding for activities related to marine activities is limited. Green Ladies look forward to engaging in campaigns in the area of raising awareness on the sustainable exploitation of the ecosystem through the promotion of training and capacity-building which remains a major pillar for the entire region.

Developments in relation to the regulation of seabed mining in the Area: a civil society perspective

Mr. Matthew Gianni informed that the negotiations on commercial mining regulation being discussed by the ISA is targeted to be completed in 2020. He recalled there is a need to manage deep-sea mining on a regional basis, including the link between South Atlantic and Indian oceans. Despite the lack of knowledge with respect to biodiversity of deep-sea habitats, he emphasized that these habitats are already under stress due to climate change, pollution (e.g., plastics, microplastics and Persistent Organic Pollutants - POPs) and fisheries. Mr Gianni presented examples of policy-relevant questions regarding deep-sea mining impacts on biodiversity. Management strategies for fisheries in the South Atlantic should be considered as an example of a standard that should be used for deep-sea mining.

Geological issues about the South Atlantic Ocean

Mr. Federico Isla introduced geological issues within the South Atlantic Ocean which need to be considered in WOA II, such as: is the South Atlantic Ocean subject to tsunamis? Are the "turbidity storms" similar to those of the North Atlantic? What is the location of gas hydrates? What is the composition of the polymetallic nodules? Are the cold-water corals similar to those of the Northern Hemisphere?

H. Break-out Group discussions

Group 1 - Possible structures of the assessment(s) of the second cycle

Chair: Ms. Eline Bassey Dimithe Bang

Rapporteur: Mr. Patrick Marc Debels

With regard to the objectives of the break-out session, the group was informed that the outline for WOA II is expected to be finalized early 2018, as the 10th meeting of the Ad Hoc Working Group will need to adopt the outline by March 2018. Following this, a second round of workshops will take place and the writing process will start.

The proposed draft structure for WOA II was discussed by the group. The occasion was also used to exchange ideas and discuss some additional matters that may be more closely related to the topic(s) of the other break-out groups.

Discussions were cantered on the identification of the objectives of WOA II. It was mentioned that WOA II should aim at inducing "changes in behaviour", and changes in the way the ocean and its resources are being dealt with. It was reconfirmed that WOA II should closely link to the 2030 Agenda, in particular, but not exclusively, SDG14. The SDGs are seen as providing the global vision and goals on oceans, and the WOA II and its structure should allow tracking progress towards these goals. Some participants alluded in this context to a perceived gap in the currently proposed structure, noting that, for example, the Summary does not explicitly refer to SDG1, 2 etc. In the above context it was also mentioned that in addition to providing quantitative descriptions, consideration should be given to including qualitative assessments, in the sense of translating numbers into results that can be used: what does the number now mean for human society and its aspirations?

In this context, reference was made to the mention made earlier that WOA II should strengthen the science-policy interface. WOA II should aim at influencing/supporting the development of the policies required to achieve the SDG vision/goals. In the context of the latter, the following question was then raised: given the global scope of the report, should WOA II aim at supporting, in first instance, the development of global and regional-level policies? Or national-level policies as well?

Furthermore, and related to the issue of the WOA II objectives, the need to balance and link information (including indicators) on the ecological status and processes with socioeconomic

status and processes was one of the issues that was most brought forward and stressed by participants. Several participants alluded in the context of the latter to the differences between developing and developed States, and that WOA II should give due attention to this reality. For instance, in the case of fish stocks, note should be taken of the existence of use by indigenous users, general use for subsistence, small-scale fisheries, and commercial/industrial fisheries. As WOA II aims to support policy development, it is important that differences between developing and developed States, and how they use/benefit from, and impact on the marine environment, is duly acknowledged. The importance of supporting goals related to (basic, secondary) education (on the marine environment) was also noted in this context.

Reference was also made in the above context to e.g. the proposed outline for the reporting mechanism on the marine environment for the Wider Caribbean (CLME+ SOMEE), where a description of the status (baseline, current status, trends and potential future conditions) of environmental variables (habitats, fish stocks etc.) are linked to a description of associated socioeconomic benefits. The description of current conditions are then compared to societal aspirations, and the drivers and pressures responsible for this gap are then analysed. This, in turn, is then used to define the required responses. The aforementioned is based on the DPSIR analytical framework, and the importance of using DPSIR for WOA II was reiterated by participants in the group. It was pointed out, in this context, that the currently proposed structure incorporates different elements of DPSIR across the outline, but linkages between the different elements of the analytical framework are less clear in the current structure. As an example, the fact that issues related to water quality are repeated under Parts 3, 4 and 5, thus spread across the outline. There seems to be a risk of repetition, and possible logical linkages between DPSIR elements related to water quality may become less evident under the proposed structure. This may result in a decrease in effectiveness with respect to triggering the required action.

Furthermore, it was pointed out that Part 2 of the draft elements for WOA II provides for the description of the impact of climate change on certain natural processes (sea surface temperature, sea level rise, etc). Participants, however, stressed the importance of also incorporating evaluation of (observed and potential future) climate change impacts across the other chapters, where environmental and socioeconomic variables are described in more detail.

Given that WOA I aimed at establishing a baseline, and with the aim of WOA II now being to look at trends, the question was raised as to whether the currently proposed structure will facilitate such trend analysis, given the structure differs in many aspects from the one used for the WOA I.

A very important comment was also put forward, that in addition to thinking about the structure of WOA II, it is very important that substantial attention is given to how the content will be presented in the report (i.e., format: text combined with e.g. figures, maps, etc.), in order to facilitate and maximize uptake by policy-makers.

The group also recommended to reach out to IGO's initiatives within the assessment region with a formal mandate related to marine resources governance and management, to get their inputs on the structure. This would facilitate, to the extent possible, the alignment of WOA II and regional reporting efforts.

It is further reported that, in addition to what is described above, several participants provided additional information, e.g. on proposed indicators related to coral reefs, comments from Mauritania on the WOA, and the proposed outline endorsed by IGO's from the Wider Caribbean for the regional reporting mechanism on the marine environment (CLME+ and SOMEE).

Add-ons by group participants:

Emphasize that the assessment should support decision makers in achieving the SDGs.

Group 2 - Regional priorities for the assessment(s) of the second cycle

Chair: Mr. Carlos Michelen

Rapporteur: Mr. Erwin Armando Marti Flores

Suggestions of priorities and themes to be incorporated/emphasized in the WOA II structure:

Part 2:

Include climate change adaptation

Part 3

3.1: Water quality impacts on the food web (hazardous substances including nuclear activity and nutrients); Oxygen concentrations

3.2: Primary and secondary production;

3.5: Include Illegal, Unreported, and Unregulated (IUU) Fishing, other benthic invertebrates such as sea cucumbers and sea urchins and fishing gear;

3.6: Aquaculture (including mariculture) production;

3.7: Include Seaweed harvesting instead of Seaweeds for food;

3.8: Remove marine reptiles from Top Predators;

3.9: Add "including inter alia food safety and regulation of trade".

Part 4

4.1: Water quality in respect of hazardous substances, including nuclear activity and nutrients;

4.2: Add freshwater inflow, run-off, estuarine/coastal development, groundwater, land use, and other stressors;

4.3 (a): Coastal and shelf biodiversity (species richness, diversity, IUCN Red List species, Ecosystem Engineers, invasive species etc.);

4.3 (b): Coastal and Shelf habitats (including coral reefs, mangroves and other wetlands, seagrass beds etc.);

4.4: Add: ecological processes after particularly sensitive areas, integrated coastal zone management, and ecosystem-based management;

4.5: Aquaculture Installations and Management;

4.6: Coastwise shipping, ferries, research vessels, recreational vessels, barges, oil platforms etc.;

4.7: Ports and harbours;

4.10: Seabed mining and biotechnology prospection within and beyond national jurisdiction;

4.12 and 4.13: Impact of solid waste disposal, marine debris and micro/nano-particles on water quality;

4.13: Atmospheric waste absorption into the ocean;

4.14: Cultural links to the sea and Indigenous Local Knowledge (ILK).

Part 5 (stay as is)

Other priorities: Education and Awareness and Collaborative Research.

Group 3 - How to make the assessment(s) of the second cycle most helpful to policy-makers in the region with their tasks, including implementing the 2030 Agenda

Chair: Ms. Amadou Jaeiteh

Rapporteur: Mr. Patricio Gonzalo Uruena Palacio

In order to make the second cycle more helpful, it would be useful, when analysing the trends and gaps, to clearly link results with the entire 2030 Agenda and not just SDG 14. This could in turn facilitate and inform better policy-making decisions. That approach would be useful, since in some countries national priorities were already aligned with SDGs, thereby negating the need to start from scratch.

Regional and global approach: Although some regional problems could reach global dimension, some of them may require global solutions e.g. greenhouse gas emissions. Others are primarily regional or national-local and may involve gaps or solutions specific to those areas. However, some local-national-regional problems may occur in many areas, have drivers in common, and thus be considered "global" in nature and benefit from similar analysis, recommendations and/or solutions.

The assessment should also be integrated, so all the information can be found in one place.

The second cycle can be very influential as an independent evaluation for many processes and fora, such as the evaluation of deep-sea fishing by the UN General Assembly (UNGA) in 2020, the BBNJ process, and for the ISA and its process of drafting regulation of seabed mining, in keeping with science-based information.

There should be a balance between science and policy, so that both effectively support each other. Consequently, although recommendations are not expected from the second cycle, the output should be clearly policy-relevant.

The output should identify urgencies and alarming issues that need to be addressed within a certain time frame, based on objective scientific evidence. That list could facilitate and promote early action from States before it is too late.

In terms of communication and messaging, which were identified as key aspects, the inclusion of summaries at the end of every chapter could facilitate the digestion of the information by policy-makers, in order to make it more understandable and action-oriented.

A communication strategy to roll out the WOA II could involve briefings to relevant international processes and negotiations, such as the previously mentioned BBNJ process, SDG 14, the 2020 UNGA deep-sea fisheries review and other relevant processes as to inform policy-makers on issues relevant to these processes. In addition, a public awareness strategy should be developed, including stakeholders such as coastal communities and municipalities, fisherfolk, NGOs, private sector entities and associations etc. This would take into account of the fact that not only policy-makers but other stakeholders will play a part in the implementation process.

Implementation of the actions to cope with the problems identified was also noted.

I. Plenary discussions

After the reports of the three groups, participants provided general comments and questions on the structure of the WOA II.

- A comparison of the structure between WOA I and the draft elements for WOA II was presented (Annex 3) and it was reinforced that the purpose of WOA II is the identification of trends from WOA I. Also, there are topics that were not considered in the WOA I, while others do not justify updates (e.g., desalination plants).
- WOA II is planned to capture changes in the assessment presented in WOA I;

- The proposed structure for WOA II is not closed;
- Gaps identified in WOA I should be tracked and assessed in order to clarify how important it should be to keep them in the WOA II;
- WOA II should consider challenges, as the trends in restoration initiatives to show their success;
- Suggestion of a high-level (Ministerial) conference to raise awareness and obtain the political will and commitments for actions;
- Educate the policy-makers to understand the situation and issues at hand and support the consideration and uptake of the findings in the policy-making processes;
- Include scenarios in a clearer way in the report/assessments for policy-makers to buy into the future of the situation at stake, as well as the consequences of inactions;
- The report should reflect the risks of deep-sea mining;
- The report should consider adaptation to climate changes, considering EBA related to different scenarios and possible impacts caused by extreme weather events, which may cause demographic consequences. As the assessment is considering a climate change perspective, it is important to include some alternatives or actions that have helped some societies to face the impacts of climate change in coastal communities. In this sense, the EBA perspective describes biodiversity and environmental services use as part of a more general strategy to social adaptation to the adverse impacts of climate change. As climate change is occurring, it influences not only average climatic conditions but extreme conditions as well. It is expected that several factors of extreme climate events (ECE) will change, like intensity, frequency, return period and extension of occurrence. In the same way, ECE are some of the risks that coastal populations need to adapt to in order to respond to such conditions;
- Against this background, the WOA II should, therefore, consider ECE given the devastating socioeconomic impact and dislocation associated with such events;
- Continuity between WOA I and WOA II is needed. There is merit in maintaining a logical flow between the first and second WOA. There should be a clear link that demonstrates whether and how previously identified gaps have been addressed in order to identify trends in the second cycle;
- There should be an appreciation for the fact that Ministries, Departments and Agencies are not homogenous. Consequently, the WOA II and its conclusions should take into account the need to ensure that uptake by policy-makers will be possible, irrespective of their level of familiarity with the issues;
- Need to refer to the WOA I to track trends and gaps;
- There are different sectors within national governments that should work in an integrated way to address the complex problems and contribute with different views;
- Suggestion to include nuclear activity related to maritime transport of radioactive products, and hazardous material that is omitted by the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes;
- Area-based management tools could be included in the Open Ocean and deep-sea sections as well;
- Part 4.13 (Marine debris, including nanoparticles) from Coastal and Shelf Seas section should be also part of Part 5 on Open Ocean;

- Cultural links could apply to Areas Beyond National Jurisdiction (ABNJ) and open ocean as well.
- Build on the Intergovernmental Panel on Climate Change (IPCC) report on oceans and cryosphere to particularly identify transport vectors of carbon from the atmosphere sequestered by the oceans and costal areas. Establish a clearer link between climate change sciences to the ocean processes (e.g., transfer of carbon from pelagic to the mesopelagic layers). This could assist policy-makers to determine which ocean processes require careful management or restoration because of their value in carbon sequestration;
- Regarding deep-ocean science, it is important to know how many countries are producing new information on the South Atlantic. Most of the information comes from the North Atlantic, and a limited amount of information exists for the South Atlantic;
- Carbon sequestration and invasive species are themes that should be present in the WOA II;
- Collaboration among countries should be fostered and considered in the assessment;
- The new structure does not make clear how to aggregate information from different topics or different spatial scales. It is not yet defined whether there will be sub-chapters on, for example, South Atlantic or one big approach to different aspects. For the Regular Process, there is need for a long-term strategy to influence decision making noting that there are still gaps that prevent a meaningful report to support policies;
- The presented structure misses the focus on environmental aspects and the link with socioeconomic aspects. The trends should capture the environmental information but also be policy-relevant. It is not clear in the proposed structure how the above would be achieved. Education and awareness-raising are critical issues to promote changes through behavioural changes and should be part of the WOA II;
- There are already several indicators of coral reefs to support a chapter construction under this theme;
- The governance structure is not at the point to work in synchrony to support the Regular Process, which makes data access difficult. In addition, big changes in some themes may not be evident in a five-year period between WOA I and II;
- Suggestion of a chapter on coastal erosion and dredging; and
- Discuss conservation and restoration relationships (e.g., coral reefs) and their potential conflicts (restoring now or later - promises).

J. Consideration of what steps might be taken within the region in the period 2017 – 2020 to support contributions to the assessment(s) under the Regular Process in the second cycle.

1. What increased cooperation or coordination between processes already under way in the region could assist in providing the information required for such assessment(s)? Participants contributed with the following:

    h) Incorporate and empower the academic institutions (local, regional and abroad) and the ways they may collaborate for technological transfer, capacity-building, data provision and scenario setting, for example;

    i) Integration with already existing initiatives, such as EAF-Nansen Programme (FAO, 2017-2021), Monitoring for Environment Security for Africa-European Union (MESA), West African Regional Fisheries Project

(World Bank Program), Fisheries Committee for Western Central Africa (FCWC), and Benguela Current Commission (BCC), among others;

j) Large Marine Ecosystems (LME) Programme reports across the globe may have inputs to the region with holistic approaches;

k) There are several projects in the Caribbean that could share information for the assessment, also being able to coordinate mechanisms to promote interactions among initiatives;

l) Ocean Biodiversity Information System (OBIS) has a mandate to support initiatives as the Regular Process, with temporal analysis of data;

m) Coral reef monitoring network and other local and regional initiatives;

n) Use of the Zone of Cooperation and Peace in the South Atlantic (ZOPACAS) as a channel to integrate countries in the South Atlantic;

o) There should be not only a national coordination/view but a regional and sub-national governance/view structure to support WOA II, strengthening the regional cooperation, e.g. between the Commission Sous-Régionale des Pêches (CSRP/SRFC) and the Ministerial Conference on fisheries cooperation among African States bordering the Atlantic Ocean (ATLAFCO/COMHAFAT);

p) Integration with the CSRP/SRFC is important, however not all countries report data and there is a need to be better engaged;

q) Integrate with regional or global protocols and conventions that already have governance structures, such as the Global Protection Action (GPA) protocols, that already have the mandate to report information on specific aspects, and the programme "International Oceanographic Data and Information Exchange" (IODE) of the IOC which shares physical oceanographic data, as well as information on coastal hazards, Sargassum monitoring, and algal blooms. In this way, it is essential to map the ongoing programmes in the region so as to work in coordination with them;

r) Connect with GOOS community, OCEATLAN (Argentina, Brazil and Uruguay), South-South cooperation (Brazil and South Africa) with a scientific agenda (open document) to produce, share data and identify gaps. Initiatives in support of the whole Atlantic as a basis (as in the Belem Statement) for scientific development, with collaboration with “northern” countries. These links may be used to reach specialists to feed into the Regular Process;

s) The Caribbean Community (CARICOM), as well as the Caribbean Regional Fisheries Mechanism (CRFM) and Organization of Eastern Caribbean States (OECS), may provide additional data and build awareness for the WOA II;

t) IOCARIBE and CLME may provide seed money to communication and outreach initiatives to raise awareness; and

u) Create a list of Sub-regional organizations to feed into the Regular Process.

2. What can be done in relation to issues on which relevant data and/or information is known to be available for the region or parts of it, but where it has not been fed into any assessment? Participants contributed with the following:

a) The GRAMED system is open to receive additional data by sending them

to DOALOS. There was a suggestion to allow a more direct data insertion to improve accuracy; and

b) The timeline for the preparation of the WOA II is such that data mining may not be possible. New data, as those derived from satellites, are welcome and the national focal points might help in this task.

3. What can be done to provide data and/or information by 2020 on issues relevant to the region where data and/or information are currently lacking? Participants contributed with the following:

    a) Contacting countries that are not engaged;

    b) Emphasize that data is lacking; and

    c) Integrate to already existing initiatives.

4. How to improve arrangements for networking between experts and organizations taking part in each workshop, and the Group of Experts and the secretariat of the Regular Process? Participants contributed with the following:

    a) Recommendation to populate the Pool of Experts and stimulate the experts to be active;

    b) The process to (re-)nominate experts will still occur for WOA II;

    c) Need to nominate National Focal Points for the Regular Process, since there are currently only two Focal Points nominated in the South Atlantic and Wider Caribbean region;

    d) Engage science or advisory committees from programmes or commissions;

    e) Engage the Deep-Sea scientists network, such as the International Network for Scientific Investigation of Deep-sea Ecosystems (INDEEP);

    f) Urge intergovernmental organization with mandate on issues relating to ocean affairs to put and prioritize the theme in their agenda and communicate to their subsidiary bodies;

    g) Proposal to nominate one National Focal point and one alternate National Focal (either governmental or scientific); and

    h) Networking between experts and organizations taking part in each workshop, and the Group of Experts and the secretariat should be continuous.

K. The secretariat of the Regular Process will present information and material relevant to the database on capacity-building needs and opportunities and to the Capacity-Building Partnership Event and Multi-Stakeholder Dialogue (to be held later in 2017), as well as the identification of best practices and the role of the workshops and participants therein in awareness-raising and outreach.

Mr. Francois Bailet and Ms. Vita Onwuasoanya (UN/DOALOS) presented on the on-going activities including the online inventory and the workshops (such as the present one) for sharing information, and the Scholarship/Fellowship Trust Fund which still requires further development, so as to attract funding. It was also indicated that States could further define their capacity-building priorities in this regard.

Comments:

- Need capacity to integrate assessments;

- Capacity-building should consider the importance of citizen/science initiatives;
- Suggestion to consider the UN-Nippon Foundation of Japan Fellowship Programme scheme as a model. How to transpose these experiences to the Regular Process and the science-policy interface? There is a possibility to promote workshops with scientists and policy-makers to discuss specific/local themes and learn from each other, but their framework should be well designed;
- We need to keep in mind that everybody has to have the same level of information to be able to participate and contribute to the process and not be marginalized;
- There is a problem with language and in expressing and understanding in different languages. Simultaneous translation has limits, especially when the discussion is focused on very specific terms. There are also no budgetary provisions for translation;
- The Regular Process needs to stimulate States to build science-policy interface and organize already existing data; and
- The secretariat indicated that it would appreciate receiving further information after the Workshop on how fellowships and other related activities could support developing countries in contributing to the Regular Process, and more generally in reinforcing the science-policy interface.

Capacity-Building Partnership Event and Multi-Stakeholder Dialogue. A Multi-stakeholder dialogue and capacity-building partnership event is planned (January 2018) focusing on capacity gaps, specific needs, best practices, opportunities, and communities of practices to feed into the process.

Consideration of capacities (learning, building and practicing skills) to achieve integrated assessments of the marine environment was emphasized in WOA I. Such capacities should consider children. Should it be simply capacity-building for integrated assessments or should it also include capacity-building for management and policy development? There is a need to promote capacity-building, increase cooperation/coordination, structure assessments to help policy-makers, improve networking, and integrate better. Capacity-building can be categorized into two categories: a) based on essentially scientific integrated assessment approach; and b) based on an integrated management policy approach. Effective management of human impacts on the ocean requires good, consistent scientific knowledge. Filling the knowledge gaps and applying that knowledge in management requires: a) The material – research vessels, scientific equipment, remote observation systems etc.; b) the personnel – experts with the training and skills to operate the equipment, analyse the results and translate them into effective policies. There is need for significant resources to support all this. Some questions remain: How to promote the dialogue between managers and scientists and explain the relevance of the science-policy interface to each. Framework for integration: How to standardize? How to compare? How to measure overall progress? How to link different fields? There is a need of more linkages to socioeconomic aspects. What difference does it make to people?

Comments:

- Skills are necessary but teams should be equipped, so we need to invest more in a wider way. We need to have the right people in these meetings, avoiding changing people from meeting to meeting, to ensure process continuity. Policy-makers should brief scientists to give answers to the policy-relevant questions;
- The WOA II needs to raise awareness to support education activities and ocean literacy by the internalization of the theme in the national curricula;
- There is a lack of governance arrangements to support a coordinated multi-level action in the region, which is exemplified by the implementation gaps in the already existing policies;

- There is a need for the WOA II to foster the adaptive and integrated management in the region;
- Fill the governance gaps to support further actions by strengthening or creating governance links. The Transboundary Waters Assessment Programme (TWAP) is an example of a framework. Scientists should be requested by decision-makers to provide information to support the decisions. Reference was made to how the CLME+ SOMEE reporting mechanism will not just report on status (trends, projections) of the marine environment/resources, and status of associated economics, but also on the status of related processes. For this purpose, the CLME+ SOMEE outline has been built using as reference two conceptual frameworks: DPSIR and the Governance Effectiveness Assessment Framework (GEAF);
- Science should be made accessible and understandable in order for policy-makers to use it. Publications/Scientific knowledge need to be translated into a more accessible language. Policy-makers need to understand why it is important to consider science, as well as the importance to use the best available knowledge;
- Development of "research strategies" by asking policy/decision-makers and/or their advisors, what knowledge gaps are hampering them in their efforts to develop better policies/make better decisions. The idea is then that these research strategies, listing priorities for policy-relevant research, are politically endorsed by the constituents of the different regional IGO's with a mandate on the marine environment. The documents are then to be used to trigger the development of policy-relevant research on relevant topics. It may be useful to give consideration to this in the context of the further planning and fine-tuning of methodologies and outline/content development process for the WOA II;
- When there is a national issue (high-level) government officials could requests scientists to help, but at the international level there are other forces that may make science-policy interface difficult due to influences of other countries and stakeholders;
- Communication to the society is a key issue to improve public engagement. Scientists should also contribute to share and build on a more general scale;
- There is a need to invest in technicians that work within governmental organs to translate scientific results and needs for high-level decision makers;
- Member States requested the UN to prepare the WOA II, that will become a reference for future decision-makers; and
- We need to consider the dynamics of decision-making, which is normally based on urgent problems and not necessarily on planning. So we need to be prepared to cope with the different problems that will emerge in the various regions in different moments.

L. Consideration of what steps could be taken, either within the region or at a global level:

1. To improve the information available for the assessment(s) of the second cycle;
2. To improve the information available for future assessments; and
3. An open discussion was moderated by the Co-chairs.

Comments:

- Empowering academia regionally and globally.

M. Oral presentation by the Chair and the Joint Coordinator(s) of the main elements that have emerged from the Workshop. Beatrice Padovani and Renison Ruwa

1. Possible structures of the assessment of the second cycle - Framework

    a) Analysis of WOA II in comparison to WOA II identified some gaps as lack of some habitats and clarity on regional approaches;

    b) Lack of capacity-building;

    c) Lack of linkages between the structure and socioeconomic issues (indicators);

    d) Logical structure of the themes in the new outline is not clearly associated to the DPSIR framework;

    e) SDG topics should be more clearly linked to the outline;

    f) Lack of specific themes, e.g., catastrophic and extreme events and their possible impacts;

    g) Lack of clarity on cross-cutting issues, e.g., governance and climate change;

    h) Options of presentation of results to improve communication with stakeholders, e.g., graphics, tables and scenarios (build on the examples from IPCC); and

    i) Local ecological/indigenous knowledge as a standing-alone chapter.

2. Regional priorities for the assessment of the second cycle

    a) Regional and local priorities and dynamics not included in the WOA II outline were identified, such as, (but not exhaustive): state of radioactivity produced by human activities in the ocean, biogeochemistry (including, oxygen concentrations, pH etc.), benthic invertebrates (not just shellfish), mariculture, role of trade, coastal erosion and dredging, connection with fisheries etc.;

    b) It is not clear how regional trends will be presented;

    c) Lack of data should be highlighted for a long-term strategy;

    d) The continued relevance of GRAMED and the development of additional databases; and

    e) Create a map of on-going programs/projects in the region to support WOA II.

3. How to make the assessment(s) of the second cycle most helpful to policy-makers in the region with their tasks, including implementing the United Nations 2030 Agenda?

    a) Real-time thermometer of the gaps (a gaptometer);

    b) Need to have one National Focal Point and one alternate National Focal Point (either governmental or scientific);

    c) Engage national authorities mandated with the implementation of the SDGs, including committees in the Regular Process;

    d) Local structure and mechanisms to support regional and sub-regional processes and society-science-policy integration;

e) Articulate a mechanism that facilitates the information flow to assess and monitor trends, including conservation effectiveness; and

f) Assessments and information need to be available and user friendly.

4. Capacity-building

a) Importance to raise awareness of society;

b) Emphasize the importance of education and communication in the Regular Process;

c) Consider citizen-science approach;

d) Capacity-building on how to conduct integrated assessments;

e) Capacity-building on data collection, standardization, interoperability and analysis; and

f) Capacity-building for officials, policy-makers, and technocrats on the Regular Process.

5. There is space for increase south-south cooperation and/or coordination between processes and empower and encourage academia to engage in the process, including populate the Pool of Experts.

Closing remarks were made by the Co-Chairs, the United Nations, IOCARIBE and Brazil.

Annex 1: List of participants

#	TITLE	FIRST NAME	LAST NAME	COUNTRY / ORGANIZATION
1	Mr.	Abdel-Ganiou	Soulemane	Togo / Ministry of Environment and Forest Resources
2	Mr.	Alassane	Conte	Guinea / Guinean Mission to United Nations
3	Mr.	Alexander	Turra	Brazil / USP
4	Mr.	Amadou	Jaiteh	Gambia / PM of Gambia to the UN
5	Ms.	Ana Lucia	Costalunga	Brazil / MB
6	Mr.	Jose Angel	Alvarez Perez	Brazil / UNIVALI
7	Mr.	Antonio	Klein	Brazil / UFSC
8	Mr.	Antonio	Marques	Brazil / USP
9	Ms.	Arianne Inemesit	Etuk	Bahamas / Bahamas PM to the UN
10	Mr.	Bagname	Simpara	Mali / Mali PM to the UN
11	Ms.	Beatrice	Padovani	Brazil / UFPE
12	Mr.	Carlos	Michelen	Dominican Republic / PM of the Dominican Republic to the UN
13	Mr.	Cesar	Toro	IOC of UNESCO / IOCARIBE
14	Ms.	Maria Fernanda	Arentz	Brazil / MB
15	Mr.	Dayne	Buddo	Jamaica / Alligator Head Foundation
16	Ms.	Diedre	Mills	Jamaica / Permanent Mission of Jamaica to the UN
17	Ms.	Eline Bassey	Dimithe Bang	Cameroon / Green Ladies
18	Mr.	Enrique	Marschoff	Argentina / Instituto Antartico Argentino
19	Mr.	Erwin Armando	Marti Flores	Mexico / Jefe de Departamento de Analisis Espacial de las Expecies y sus Habitat para la Adaptacion del Cambio Climatico

20	Ms.	Francisca	Delgado	Angola / National Coordination Body for Liaison with IOC, Ministry of Fisheries and Oceanx/ liaison with the IOC- Ministry of Fisheries and Oceans and in the information of address is missing-Luanda-Angola
21	Ms.	Hawa Bint	Yaqub	Ghana / IOC/UNESCO group of Expert
22	Mr.	Luciano	Hermanns	Brazil / AOCEANO
23	Mr.	Mario	Soares	Brazil / Rio de Janeiro State University
24	Mr.	Matthew Garret	Gianni	Holland / Deep Sea Conservation
25	Mr.	Mohamed El Hafedh	Ejiwen	Mauritania /INSTITUT MAURITANIEN DE RECHERCHE OCEANOGRAPHIQUE ET DES PECHES (IMROP)
26	Ms.	Nohora	Galvis	Colombia / Directora Observatorio Pro Arrecifes Fundación ICRI Colombia Coordinadora Red Internacional de Observadores Voluntarios del Arrecife
27	Mr.	Pablo	Muniz Maciel	Uruguay, Universidad de la República, Faculty of sciencies
28	Mr.	Patricio Gonzalo	Uruena Palacio	Argentina / Ministry of Foreign Affairs, Legal Advisors Officer
29	Mr.	Patrick Marc	Debels	Belgium /UNOPS (UNDP/GEF CLME+ Project)
30	Ms.	Patrizia	Abdala	Brazil / UPEC_Mar / FURG
31	Mr.	Peter	Harris	Norway / GRID-Arendal
32	Mr.	Renison	Ruwa	Kenya / Joint Coordinator / Kenya Marine and Fisheries Research Institute
33	Mr.	Zacharie	Sohou	Benin / Institut de Recherches Halieutiques et Océanologiques du Bénin (IRHOB/CBRSI)
34	Mr.	Francois	Bailet	UN DOALOS
35	Ms.	Vita	Onwuasoanya	UN DOALOS
36	Ms.	Andrea	Cruz	MCTIC / Brazil
37	Mr.	Andrei	Polejack	MCTIC / Brazil

38	Ms.	Léia	Ribeiro	MCTIC / Brazil

Annex 2: Agenda of the South Atlantic (between the African and American coasts) and the Wider Caribbean Workshop

Workshop to support the Regular Process

The South Atlantic (between the African and American coasts) and the wider Caribbean

Camboriú, Brazil
14-15 November 2017

DRAFT AGENDA

First day – Tuesday 14 November 2017

09:30 am Registration

10:00 am 1. Opening remarks and welcome addresses

Beatrice Padovani, Co-chair
Renison Ruwa, Co-chair
Francois Bailet, UN/DOALOS
Cesar Toro, IOCaribe/IOC/UNESCO
Andrei Polejack, Brazil – host country

10:30 am 2. Adoption of agenda for the Workshop and designation of a rapporteur

Co-chairs

10:40 am 3. Presentation on current developments in global ocean policies and on the Regular Process.

Francois Bailet and Vita Onwuasoanya, UN/DOALOS

11:00 am 4. Presentation on the First Global Integrated Marine Assessment – World Ocean Assessment I, and discussion of the strengths and weaknesses of the Assessment.

A) Assessment of Assesments phase
Peter Harris

B) The WOA I
Beatrice Padovani and Enrique Marschoff

11:40 am 5. Presentation by a Joint Coordinator of the Group of Experts of the Regular Process of a document on the possible structure of the assessment or assessments to be prepared under the Regular Process in the second cycle, running until the end of 2020.

Renison Ruwa

12:00 ***Lunch-break***

01:30 pm 6. Review of assessments that have been carried out in the South Atlantic since 2012 and that are proposed to be carried out within the region in the period 2017 – 2020, in order to identify how the assessment(s) under the Regular Process can best build on them.

Main outcomes of the South Atlantic Workshop of the first cycle of the WOA, Abidjan, Côte d'Ivoire
Alexander Turra - Brazil
Institutionalizing a reporting mechanism on the State of the Marine Environment and associated Economies for the CLME+ region
Patrick Debels – CLME+ project

Marine Biodiversity Assessments - OBIS, BPBES and Sisbiota/FAPESP
Antonio Marques - Brazil
Status of the Ghanaian marine and coastal ecosystem
Hawa Bint Yaqub - Ghana
Coral Reef Conservation

Nohora Galvis - Colombia

Assessment of major ecosystem services from the marine environment: the case of Cameroon.

Eline Bassey - Cameroon

03:00 pm 7. Establishment of break-out groups and designation of chairs and rapporteurs.

Co-chairs

03:15 pm 8. Break-out groups meet to discuss:

(a) Break out group 1: Possible structures of the assessment(s) of the second cycle *(room 1)*;

(b) Break out group 2: Regional priorities for the assessment(s) of the second cycle *(room 1)*;

(c) Break out group 3: How to make the assessment(s) of the second cycle most helpful to policy-makers in the region with their tasks, including implementing the United Nations 2030 Agenda *(room 2)*.

7:30 pm **Icebreaker (all welcomed!)**

Second day – Wednesday 15 November 2017

09:00 am Rapporteurs meet to finalize reports

10:00 am 9. Report-back session for the break-out groups and discussion of their conclusions.

Rapporteur from break out group 1

Rapporteur from break out group 2

Rapporteur from break out group 3

10:45 am 10. Consideration of what steps might be taken within the region in the period 2017 – 2020 to support contributions to the assessment(s) under the Regular Process in the second cycle. This consideration will be broken down into separate discussions of:

10:45 am (a) What increased cooperation or coordination between processes already under way in the region could assist in providing the information required for such assessment(s);

11:00 am (b) What can be done in relation to issues on which relevant data and/or information is known to be available for the region or parts of it, but where it has not been fed into any assessment;

11:15 am (c) What can be done to provide data and/or information by 2020 on issues relevant to the region where data and/or information are currently lacking;

11:30 am (d) How to improve arrangements for networking between experts and organizations taking part in each workshop, and the Group of Experts and the secretariat of the Regular Process.

12:00 ***Lunch-break***

01:30 pm 11. The secretariat of the Regular Process will present information and material relevant to the database on capacity-building needs and opportunities and to the Capacity-Building Partnership Event and Multi-Stakeholder Dialogue (to be held later in 2017), as well as the identification of best practices and the role of the workshops and participants therein in awareness-raising and outreach.

Francois Bailet and Vita Onwuasoanya, UN/DOALOS

01:45 pm 12. Consideration of how capacities to achieve integrated assessments of the marine environment can be improved.

Renison Ruwa

02:30 pm 13. Consideration of what steps could be taken, either within the region or at a global level:

(a) To improve the information available for the assessment(s) of the second cycle;

(b) To improve the information available for future assessments.

Open discussion, moderated by co-chairs

04:00 pm 14. Oral presentation by the Chair and the Joint Coordinator(s) of the main elements that have emerged from the workshop.

Beatrice Padovani and Renison Ruwa

05:00 pm 15. Final remarks by:

Beatrice Padovani, Co-chair
Renison Ruwa, Co-chair
Francois Bailet, UN/DOALOS
Cesar Toro, IOCaribe/IOC/UNESCO
Andrei Polejack, Brazil – host country

05:30 pm 16. Closure of the Workshop.

Annex 3: Comparison between the structure of World Ocean Assessment (WOA) I and II (Prepared by Peter Harris)

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Part III Assessment of major ecosystem services from the marine environment (other than provisioning services)	
Chapter 3: Scientific understanding of ecosystem services	Part 2 (not clear which section?)
Chapter 4: The ocean's role in the hydrological cycle	2.1, 2.2
Chapter 5: Sea - Air Interaction	
	2.3 sea level and 2.4 acidification
Chapter 6: Primary production, cycling of nutrients, surface layer and plankton	3.2
Chapter 7: Calcium carbonate production and contribution to coastal sediments	
Chapter 8: Aesthetic, cultural, religious and spiritual ecosystem services derived from the marine environment	4.15
Chapter 9: Conclusions on major ecosystem services other than provisioning services	
Part IV Assessment of the cross - cutting issues: food security and food safety	
Chapter 10: The oceans and seas as sources of food	
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Chapter 13: Fish stock propagation	3.3
Chapter 14: Seaweeds	3.7
Chapter 15: Social and economic aspects of sea - based food and fisheries	3.9
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Part V Assessment of other human activities and the marine environment	
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Chapter 18: Ports	4.7
Chapter 19: Submarine cables and pipelines	5.7
Chapter 20: Coastal, riverine and atmospheric inputs from land	3.1, 4.1
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Chapter 27: Tourism and recreation	4.11
Chapter 28: Desalinization	
Chapter 29: Use of marine genetic resources	
Chapter 30: Marine scientific research	
Chapter 31: Conclusions on other human activities	
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