Report of the Fourth Workshop of the second round of regional 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

Bali, Indonesia, 8-9 November 2018

I. Summary of discussions

The present document provides a summary of the discussions and information emanating from the second regional Workshop of the second 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 Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and Gulf of Aden and the ROPME/RECOFI area. The Workshop was held in Bali, Indonesia from 8 to 9 November 2018.

The presentations, discussions, as well as the Chair's and Joint Coordinator's summary of the Workshop are synthesized under the following overarching topics: (a) Presentation on the outline for the second world ocean assessment and the preliminary timetable and implementation plan for the preparation of the second world ocean assessment; (b) Presentation on the review of the outcome of the Workshop for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area, held in Zanzibar, United Republic of Tanzania in December 2017; (c) Consideration of the intended structure of the various chapters (and sections of chapters) of the second world ocean assessment; (d) Consideration of selected chapters and sections of chapters in the light of the structure of the outline for the second world ocean assessment, including possible chapter frameworks; (e) Consideration of important issues in other chapters; and (f) Consideration of learning points/needs and resources that may be relevant to the inventory of capacitybuilding opportunities relevant for the Regular Process being compiled and maintained by the secretariat, and to the multi-stakeholder dialogue (case studies of good practices) and capacity-building partnership event, to be held in early 2019. The annexes to the present summary provide other details of the Workshop and its outcomes, including the agenda and list of participants.

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 (Ad Hoc Working Group of the Whole)¹ and endorsed by the General Assembly,² includes in the activities for 2018 the holding of a second round of regional workshops to, *inter alia*, support the development of the second world ocean assessment by enabling the collection of regional-level data and the meeting of relevant members of writing teams.³ The "Guidelines for the second round of Workshops in 2018 to Assist the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects" developed by the Group of Experts of the Regular Process give guidance to

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.

the arrangements of the 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. The Guidelines are provided in Annex 1 to the present report.

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

- (a) Support the development of the second world ocean assessment by enabling the collection of regional-level information and data for the preparation of the second world ocean assessment and to enable relevant members of writing teams for specified chapters to meet, and to interact with experts from the region in the fields covered by those chapters;
- (b) Enable the regional experts to better understand the approaches of the Regular Process and to develop their skills in integrated assessment, covering environmental, social and economic aspects;
- (c) Enable the writing teams for the chapters selected for the workshop with the help of the Joint Coordinators and the members of the Group of Experts of the Regular Process ("the Group of Experts") who are present, to discuss the structure of their chapter, its relationship with the other chapters of the outline for the second world ocean assessment ("the outline") and responsibilities for developing the chapter text;
- (d) Provide opportunities for the members of the Group of Experts present to highlight important issues within the outline other than those of the selected chapters, in order to broaden understanding of the entire Regular Process;
- (e) Consider what learning points / needs and resources may be relevant to the inventory of capacity-building needs and opportunities relevant for the Regular Process being compiled and maintained by the secretariat, and to the multi-stakeholder dialogue (case studies of good practices) and capacity-building partnership event, to be held in early 2019;
- (f) Consider what capacity-building steps might be taken, both at global and regional levels, in relation to the issues covered by the selected chapters.

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 Indonesia. It was held at the Padma Legian Resort Hotel in Bali, Indonesia. The Workshop was conducted in accordance with the draft agenda (Annex 2).

The Workshop was chaired by Mr. Ayodhia G.L Kalake, Assistant Deputy Minister for Maritime Delimitation Zone. It was attended by the Joint Coordinators of the Group of Experts of the Regular Process, Mr. Renison Ruwa (Kenya) and Mr. Alan Simcock (United Kingdom of Great Britain and Northern Ireland). Participants also included representatives from the following States: Australia, Brazil, Cambodia, Canada, Indonesia, Iran (Islamic Republic of), Italy, Kenya, Mozambique, Madagascar, Nepal, Portugal, Saudi Arabia, Sierra Leone, Sudan, United Kingdom,

Viet Nam and Zimbabwe and from intergovernmental organizations (IGOs), regional scientific bodies, universities and academic research institutes (see Annex 3, List of Participants).

Overall, the Workshop was attended by 54 participants (20 females, 34 males). The participants included 10 proposed members of writing teams for the second world ocean assessment and five members of the Group of Experts who are Lead members for relevant chapters of the second world ocean assessment. The United Nations was represented by the Deputy Secretary of the Ad Hoc Working Group of the Whole on the Regular Process and Programme Management Officer of the secretariat of the Regular Process.

The Workshop opened with welcoming remarks delivered on behalf of the Government of Indonesia by Mr. Purbaya Yudhi Sadewa, Deputy Minister for Maritime Sovereignty. Mr. Sadewa underlined that all participants in the Workshop had a responsibility to provide the most accurate data that will be used by policy makers all around the world to determine how they are going to manage the ocean and conserve its resources. The importance of ensuring continuous and comprehensive ocean research in all regions was also stressed. Mr. Sadewa also recalled that the Workshop itself was designed as a venue for the collection of regional-level information and data for the preparation of the second world ocean assessment, to build capacity and to facilitate outreach and awareness-raising. He also recalled that the Regular Process has an objective to improve understanding of the oceans and to develop a global mechanism for delivering science-based information to decision makers and public. The representative of the United Nations also delivered opening remarks. The draft agenda for the Workshop was subsequently adopted.

The opening segment was followed by the consideration of the items on the agenda, which included plenary sessions, a number of presentations, breakout group discussions and feedback from participants. The second day started with presentations on important issues in other chapters of the second world ocean assessment, followed by meetings in breakout groups dealing with the relevant chapters identified for discussion at the Workshop. In the afternoon, a rapporteur from each breakout group reported to the plenary on the discussions in their group, following which the Workshop considered the remaining items on the agenda.

The Workshop concluded with a presentation by Mr. Alan Simcock, as requested by the Chair, of a summary of the main elements that emerged during the discussions. It was noted that guidance was given to all writing teams to capture social and economic aspects in the course of their drafting. It was highlighted that the experts would need a consistent system for cross-referencing between chapters (since line and page numbers would change) and that guidance would be provided on this by the Group of Experts. The Chair also underlined how ocean issues are intertwined and should be considered together. The Chair closed the Workshop together with the representative of the United Nations.

IV. Summary of discussions

The discussions which took place under the various agenda items provided an important opportunity for members of the writing teams as well as experts from the region to discuss the outline for the second world ocean assessment, as well as the

relevant chapters of the second world ocean assessment that were the focus of the Workshop. These discussions have been summarized below.

A. Presentation on the outline for the second world ocean assessment and the preliminary timetable and implementation plan for the preparation of the second world ocean assessment

Mr. Alan Simcock gave a presentation on the outline for the second world ocean assessment and the preliminary timetable and implementation plan. The presentation covered the history of the preparation of the outline, including its adoption by the tenth meeting of the Ad Hoc Working Group of the Whole. Mr. Simcock noted that the outline was based on the DPSIR (Drivers, Pressures, State, Impacts, Responses) framework.

The presentation noted that the introduction to the second world ocean assessment would restate the main principles governing the Regular Process. The focus would be on scientific and policy developments since the collection of the data on which the First Global Integrated Marine Assessment (first World Ocean Assessment or WOA I) was based and, where possible, trends would be brought out.

Regarding the future summary of the second world ocean assessment, it was noted that, as in WOA I, it would be presented to the General Assembly for its approval. It was noted that the summary should not aim to be a chapter-by-chapter summary, but to present an integrated view of the conclusions across the board, as well as continue to present a comprehensive view of knowledge gaps and capacity-building gaps and needs. It was also noted that, as compared to the summary for WOA I, the summary for the second world ocean assessment would need to be substantially shorter — perhaps 25 pages, rather than 60 pages.

As regards the chapter structure, it was noted that it envisages the following: a one-paragraph summary of the findings of the second world ocean assessment; a summary of the baselines set by WOA I; a description of environmental changes as well as of economic and social changes; the identified information gaps and capacity-building gaps.

Regarding the state of the marine environment, it was noted that the consideration of the following was expected: the identification of trends in the physical and chemical state of the ocean, in species biodiversity, in habitat biodiversity, and in the interaction of human society and the ocean; coastal communities; human health and the ocean; maritime industries; and maritime cultural services, including the extent to which marine cultural resources are conserved, support for cultural activities linked to the sea, and the scale of use of objects from the sea valued for cultural reasons.

As regards trends in pressures, it was noted that the following needed to be addressed: developments in pressures from climate change; developments in pressures from human activities (land-based; extraction of living marine resources; extraction of non-living resources; other human activities (shipping, tourism etc.), and their cumulative impacts.

Participants were informed that the chapter structure would also consider trends in benefits from management tools, including the following: marine spatial planning; other management approaches e.g., ecosystem-based, culture-based, community-based, and area-based (including marine protected areas (MPAs), etc.); adaptation to

climate change and resilience building and understanding of the overall benefits from these activities.

Mr. Simcock also outlined the key milestones in the preliminary timetable and implementation plan for the second world ocean assessment, such as the approval of the Lead and Co-Lead members for the chapters of the assessment (drawn from the Group of Experts) as well as the constitution and approval of the writing teams. He highlighted that the drafting of the assessment would be followed by a review process by the Group of Experts, by peer review, and by two rounds of review by States in 2020. He informed participants that the expectation was that the Group of Experts would finalize the document and then submit the assessment to the Ad Hoc Working Group of the Whole in the spring of 2020, following which it would be submitted to the General Assembly in the fall of 2020.

B. Presentation on the review of the outcome of the Workshop for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area, held in Zanzibar, United Republic of Tanzania in December 2017

Mr. Renison Ruwa (Co-Chair of the regional Workshop for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI Area held in Zanzibar, United Republic of Tanzania in December 2017) gave a presentation on the outcome of that Workshop.

Regarding the key elements discussed at the 2017 regional Workshop, Mr. Ruwa noted that the discussions focused on existing or future assessments in the region, so as to identify how the assessment under the Regular Process can best build on these; the possible structure of the assessment of the second cycle; regional priorities for consideration in the preparation of the second assessment; how to make the assessment of the second cycle 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); on possible steps which may be undertaken within the region to support contributions to the second assessment; 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; 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 assessments of the second cycle, and to improve the information available for future assessments.

Mr. Ruwa further noted that the regional workshop stressed the importance of including all relevant stakeholders in the process, so as to make sure that all the identified priorities were addressed. He noted that the following key principles had been identified, namely: good governance, sustainability; issues of wellbeing; gender; ocean acidification; microplastics, coastal erosion, coral bleaching, ocean modelling, blue economy, safety and security at sea, particularly for fishermen; illegal unreported and unregulated (IUU) fishing; mariculture and interaction with capture fisheries, ecosystem approach to fisheries (EAF); productivity of the ocean; invasive alien species; relationship between human wellbeing and biodiversity; and access and benefit sharing. He also noted that capacity-building was considerably emphasized, in particular with respect to modelling and technology innovation, for biodiversity

assessments, for building science-policy connections, and for building technical capacity related to the Sustainable Development Goals (SDGs). He further stressed on the importance of technical development and the sharing of technical knowledge in order to achieve the targets set by the 2030 Agenda.

C. Consideration of the intended structure of the various chapters (and sections of chapters) of the second world ocean assessment

The presentation on the review of the outcome of the Workshop for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI Area was followed by a presentation by Mr. Renison Ruwa of the intended structure of the various chapters (and sections of chapters) of the second world ocean assessment. The presentation highlighted the following proposed structure: (a) a one-paragraph abstract of the chapter or section; (b) a very short summary of the situation recorded in WOA I; (c) a description/overview of environmental changes between 2010 and 2020; (d) a description of the economic and social consequences and/or of the other economic or social changes (including, where appropriate, changes in global distribution of benefits and disbenefits and issues relating to concepts of natural capital); (e) a description of the main (remaining) information gaps in relation to the subject matter; and (f) a description/assessment of the main capacity-building gaps in the field. With regard to the abstract, it was noted that clear, simple language would be essential. Each chapter was expected to include a summary of relevant parts of WOA I and would address environmental changes between 2010 and 2020 (mindful that some observations in 2017 to 2020 will not be available). It was noted that, as much as possible, information should be put in a table format (some cells may have to be descriptive text, not numerical data) and should be region-specific. Regarding the short summary of the relevant situations in WOA I, it was observed that a key challenge would be the ability to provide enough information to enable new readers to understand what was in WOA I in a succinct and engaging manner. As regards the relevant economic and social consequences and/or other economic or social changes, it was noted that each chapter should answer questions, such as what (if anything) has influenced the economic and social aspects and whether there have been independent economic or social changes that have had environmental impacts.

On the main remaining information gaps, it was noted that WOA I summarized information gaps that needed to be filled, both for assessment and management. The second world ocean assessment would therefore need to look at any changes or improvements, as well as any new information sources. Finally, chapters in the second world ocean assessment would need to consider the main remaining capacity-building gaps - what has changed since WOA I, whether there are new solutions that need enhanced capacity to support them, and whether there are new problems where capacities do not yet exist. It was noted that the multi-stakeholder dialogue and capacity-building partnership event to be held in January 2019 could be an important information source in this regard.

In the ensuing discussions, in response to a question on the issue of sea-level rising and how this is also affecting countries outside the Arctic circle including with changes to navigation and transportation worldwide, it was noted that these issues had been covered in WOAI. In this regard, it was also noted that sea-level rise would also have an effect on the distribution of species.

D. Consideration of selected chapters and sections of chapters in the light of the structure of the outline for the second world ocean assessment, including possible chapter frameworks

The discussions under this item of the agenda were preceded by a brief introduction of the respective chapters by the Lead members or Convenors, followed by the participants being divided into parallel breakout groups to review the substance of chapters and related capacity-building needs, where possible. The breakout group sessions were followed by a plenary session during which each group's rapporteur reported on the discussions in the group. The following is a brief summary of the introduction, presentations and discussions.⁴

(i) Chapter 4: "Drivers" (Renison Ruwa)

Mr. Renison Ruwa gave a brief presentation on the development of chapter 4 which deals with drivers. He noted the cross-cutting nature of this chapter and that the DPSIR framework, which had been agreed as the framework for the second world ocean assessment, was a major component of this chapter.

He further noted that the approved sections that would form this chapter were as follows: (a) Developments in human population (especially populations in coastal areas); (b) Development aspirations: (c) Food security and food safety; (d) Resource use (including demand for metals and hydrocarbons and the use of marine genetic resources); (e) Energy; (f) Transport; (g) Leisure and recreation; (h) Drive to sustainability (including SDGs); (i) Cultural needs and aspirations; and (j) Contributions from improved technologies.

Breakout group report and plenary discussions

Mr. Ian Butler presented the report from the breakout session on chapter 4. He noted that the group had discussions on what constitutes a driver, and that it agreed it should be anything that causes an effect on the condition of the oceans or on the sustainable use of the oceans. It was noted that development aspirations will vary between regions and this will drive how the ocean changes over time. For example, depending on the aspirations of a region, there may be a desire (or lack thereof) to adopt technologies, or change maritime boundaries or develop port infrastructure.

Mr. Butler also listed some of the different factors to look for in each driver, namely: food security and food safety, actual resource use, environmental aspects: (biodiversity), energy demands and capability of producing the need energy capability, need for extraction of resources, maritime transportation (pollution, ballast water etc.), recreation (coastal development tourism), climate change, and how to meet the goals set by the 2030 Agenda. It was noted that SDGs were a driver for changing not only the use of the oceans, but the efficiency with which resources are used. The importance of using indicators to define baselines for some aspects of the oceans and for the monitoring and for defining trends, was stressed. Also, the need to collect a wide range

⁴ It is noted that the level of detail for the summaries varies depending on, inter alia, the chapter topic, and size (number of sub-chapters), the level of detail in the presentations and the number of experts available to provide input in the groups.

of information and statistics and the challenges in summarizing such data was highlighted.

Some key drivers were discussed as follows:

- (a) Development in human populations: Changes in human population is an indirect driver that can exacerbate other direct drivers. Populations in coastal areas, put a demand on coastal areas, e.g., population changes that affect resource use or need, diminishing terrestrial coastal and marine resources, pollution, habitat change, etc.
- (b) Development aspirations: Development aspirations involve both direct and indirect drivers influencing each other. These involve development strategies for economic growth and human well-being at international, regional and country levels with regard to oceans, for example port development, oil and gas, fisheries, expansion of other activities in the exclusive economic zone etc.
- (c) Sustainable development goals: This is a combination of direct and indirect drivers for change to meet the SDGs, as well as the capability of meeting the SDGs. In this regard, it was noted that there may be a conflict of aspirations, since some aspirations deigned for sustainable use of the environment may not be consistent with the aims of the SDGs.
- (d) Cultural needs and aspirations of a given regional location: These are dominated by indirect drivers operating by altering the level or rate of change of one or more direct drivers. In this regard, the following issues were considered relevant:
 - Cultural values and how they change;
 - Indigenous, customary ways and cultural requirements;
 - Aesthetic values;
 - Traditional methods of resource management e.g. fisheries;
 - Gender considerations.
- (e) Contributions from improved technologies. These are also dominated by indirect drivers operating by altering the level or rate of change of one or more direct drivers.
 - Perspectives from developing and developed countries can differ substantially, especially:
 - Desire for technology in developing countries;
 - o Recognition of problems of implementing technologies;
 - Conflict with aspirations outlined above;
 - Benefits of technology without compromising development aspirations, health/welfare, natural or aesthetic values;
 - Consider that new technologies may generate negative or unintended consequences;
 - Need to consider mutually agreed goals or objectives (e.g. negotiations required).

A variety of data sources were proposed for the key drivers for the region, and which may also apply to other regions:

- Development and human population;
- Changes in population for major coastal cities past, present future projections (2025);
- Urbanization and land use maps.

(a) Development aspirations

- Regional or country development plans;
- Stability of government across the term of the development plans;
- Rates of coastal development, increased population, and loss of natural environment.

(b) Food security and safety

- Existence of regional health/welfare plans;
- Food availability per capita e.g. seafood;
- Incidence of seafood-borne disease or toxins (e.g. ciguatera);
- Measures of pollution which threaten food supplies;
- Climate change effects on food security;
- Traceability of seafood (food safety, illegal fishing).

(c) Resource use

- Monitoring of indicators;
- Sustainable fisheries, annual reports, FAO's State of World Fisheries and Aquaculture report (SOFIA);
- Trends in catch rates;
- Numbers of oil wells, amount exploration (oil/gas);
- Numbers of fishers (commercial, artisanal, recreational);
- Economic indicators: product prices, Gross Value Product (e.g. fishery);
- Employment related to oceans (e.g. tourism, ferries);
- Availability of freshwater (need for desalination);
- Marine protected area(s);
- Other resource use (e.g. seawater, sediments, subsurface resources, tourism, research).

(d) Energy

- Wind farms and other clean energy options (e.g. tidal or wave energy);
- Potential for nuclear energy;
- Locations of energy infrastructure;
- Demand for energy versus energy production capability (e.g. deficit);
- Development plans for energy production;
- Need for extraction of geological resources (e.g. metals and hydrocarbons);
- Marine genetic resources.

(e) Transport

- Maritime transport statistics (numbers of ships transiting, (passengers, categories of ships);
- Port development (number of ports, port areas, number of vessels using ports);
- Marinas;
- Maritime emergency incidents (groundings, oil spills, marine pollution);
- Laws regarding ship waste disposal;
- Pollution levels;
- Rates of ballast water discharge and contamination by ballast water.

(f) Leisure and recreation

- Recreational fishing (numbers);
- Rates of tourism (numbers of visitors);
- Tourism related coastal development (e.g. number of beach resorts) (refer to chapter on tourism development);

- Marine protected area(s).
- (g) Drive to sustainability (SDG)
 - Identify which SDGs apply to area;
 - Meeting goals for SDGs: Which ones and how many?
- (h) Cultural needs and aspirations
 - Any reports on indigenous values? (e.g. United Nations Educational, Scientific and Cultural Organization (UNESCO));
 - Number of cultural groups;
 - Number of UNESCO sites;
 - Number of traditional or customary management plans;
 - Noise maps;
 - Social values, e.g. aesthetic, natural value.

In the ensuing discussions, the need to agree on the definition of driver was stressed, noting that confusion often arises as to what constitutes a driver and what constitutes a pressure.

(ii) Sub-Chapters 7E "Tropical and subtropical coral reefs" and 7F "Cold water corals" (Karen Evans)

Ms. Karen Evans gave a brief presentation on the development of sub-chapter 7E on "Tropical and subtropical coral reefs". Since experts on chapter 7F were not able to participate in this regional workshop it was decided that this sub-chapter would not be discussed in the Workshop.

Breakout group report and plenary discussions

Ms. Karen Evans presented the report from the breakout session on chapter 7E. While recalling that the baseline for this chapter was from WOAI, she noted that there was no consistent monitoring of tropical and subtropical coral reefs across the region and that assessments were undertaken using different methods. She also noted that a number of assessments provide sub-regional indications or changes in states that might have occurred in tropical and subtropical reefs. While noting the issue of trade in coral and ornamental fisheries, Ms. Evans noted that there was a move towards having the communities more involved in the conservation of coral reefs. The importance of empowering communities and of the need for robust and standardized way to evaluate coral reefs in terms of contributions that they make to countries and regions, was also stressed. She also noted that this chapter, while having some overlaps with chapter 30 on developments in management approaches, should cover both living and dead corals, noting that the latter also play a key role in habitats for certain species. It was noted that while some corals are able to recover in response to the adverse impacts of climate change and coral bleaching, some other corals are unable to properly recover.

She also noted that the group shared experiences regarding the current condition of coral reefs in their respective countries.

The key issues the group agreed that should be reported in the second world ocean assessment were summarized as follows:

- The impact of climate change on coral reefs, including coral bleaching and heatwaves, as well as coral reef resilience;
- Coral reef management, monitoring and assessment;
- The socio-economic aspects/impacts of human and natural interactions with coral reefs, including the importance of local knowledge and empowering local communities in preserving coral reefs;
- The sustainability of coral reefs, their economic value and the issue of coral trade.

In the ensuing discussions, it was noted that the issue of transhipment should also be addressed in this chapter given the adverse impact of this activity on corals.

(iii) Chapter 8: "Trends in the state of human society in relation to the ocean" (Alan Simcock)

Mr. Alan Simcock gave a brief presentation on the development of chapter 8 on "Trends in the state of human society in relation to the ocean". In the ensuring discussions, the importance of making sure that indigenous and traditional knowledge with respect to the protection and preservation of the marine environment was included in the scope of this chapter was stressed. Moreover, issues relating to maritime security with respect to smuggling, as well as IUU fishing and its related crimes, and small-scale fisheries were also identified as key aspects. Mr. Simcock noted that, while chapter 8 would discuss issues that affected indigenous peoples, they would also be covered extensively under chapter 31 on "Developments in the understanding of overall benefits from the ocean to humans". He also noted that the issue of IUU fishing would be dealt with more specifically in chapter 15 on "Changes in capture fisheries and harvesting of wild marine invertebrates".

Breakout group report and plenary discussions

Mr. Alan Simcock gave a presentation on the discussions in the breakout group on chapter 8. In relation to sub-chapter 8A on "Coastal communities", it was agreed that the sub-chapter be developed around the following key points/considerations, namely:

- Coastal communities would be impacted by all pressures;
- The need to have clear links between this chapter and other questions, such as sea level rise, fish stocks, etc.;
- The distribution of population around the world in relation to the sea;
- The identification of areas where indigenous peoples and local communities with traditional knowledge and rights are found (showing links to SDGs 14);
- The identification of the proportions of GDP of coastal States that are related to ocean-related activities;
- The identification of the vulnerability of coastal communities (studies to be reported);

- The identification of "coastal communities" in the light of data available from the United Nations Statistics Commission; and
- Problems of remote islands.

In relation to sub-chapter 8B on "Human health as affected by the ocean", it was agreed that the sub-chapter be developed around the following key points/considerations, namely:

- Preconditions for health are safety, food, and clean water;
- Studies available on impact of sea water borne pathogens and seafood on populations;
- The inclusion of Indonesia's monitoring program for seafood exports;
- Studies on production of chitin from crustaceans;
- Controls on packaging seafood with formaldehyde and non-food additives;
- Availability of procedures for beach closure; and
- The importance of educating authorities and the public on problems.

In relation to sub-chapter 8C on "Maritime industries", it was agreed that the sub-chapter be developed around the following key points/considerations, namely:

- Studies on inter-island shipping;
- The importance of new Arctic shipping routes;
- The dearth of known studies on death and injury to fishers and seafarers;
- Data on IUU fishing and crimes related to fisheries industries (smuggling, human trafficking);
- Data on piracy;
- Studies on support for small-scale fishing;
- Studies on mariculture;
- The need to improve the knowledge and awareness of marine weather information for fisherman;
- Offshore renewable energy, oil and gas;
- Studies on offshore oil and gas;
- Studies on decommissioning and reuse decommissioned rig sites/rigs-to-reef;
 and,
- Programmes to promote effective post-harvest use of fish

Moreover, it was noted that the United Nations Office on Drugs and Crime and the International Labour Organization, as well as the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against ships in Asia (ReCAAP) should be used as a source of information on piracy.

In relation to sub-chapter 8D on "Maritime cultural services", it was agreed that the sub-chapter be developed around the following key points/considerations, namely:

• Studies on protecting local culture in relations to tourism (West Java);

- Improving ocean literacy;
- Valuation of maritime culture;
- Revitalization of local maritime culture;
- References to implementation of international agreements on maritime culture;
- Information on artefacts from wrecks;
- The need to source information on traditional whale and turtle hunting in the Eastern Part of Indonesia:
- Protecting cultural traditions by promoting events;
- Preventing the distortion of, and safeguarding, cultural traditions; and
- Bans on exports of coral alongside encouragement of coral farming.

(iv) Chapter 14: "Changes in coastal and marine infrastructure" (Alan Simcock)

Mr. Alan Simcock gave a brief presentation on the development of chapter 14 on "Changes in coastal and marine infrastructure". While noting the connection of this chapter with the findings of chapters 18, 19, 26 and 27 of WOA I, he noted that this chapter would be developed along the following four questions, namely: (a) Have we missed anything?; (b) Can we update the information that we have? (c) Are there new sources of information that WOA I did not tap?; and (d) How can we integrate these disparities?

Breakout group report and plenary discussions

Mr. Alan Simcock gave a presentation on the discussions in the breakout group on chapter 14. While noting the difficulty in finding a global database on this issue, the need to look at the way in which coastal protection has being approached around the world, was stressed. In this regard, it was noted that Indonesia has valuable information on the application of an ecosystem-based approach to coastal protection and restoring ecosystems. With regard to the regional level, it was noted that the group raised the issue of the construction of the Kra isthmus Canal across southern Thailand, noting that such a development would drastically change the shipping routes. The creation of islands from sedimentation and other natural processes, as well as the creation of artificial islands around the world, was also raised. In this regard, the case of the Segara Anakan lagoon in Indonesia was mentioned. With regard to the importance of Tsunami early warning systems, the infrastructure to monitor sea level change in Indonesia was highlighted as a valuable and effective example.

Mr. Simcock also noted that the discussions, among other things, included the necessity of regulation of submarine pipelines and reclamation; and how development of material on ports development would relate to coastal protection and restoration of ecosystems.

(v) Chapter 15: "Changes in capture fisheries and harvesting of wild marine invertebrates" (Alan Simcock on behalf of Michelle McClure)

Mr. Alan Simcock gave a brief presentation on chapter 15 on behalf of the Lead member, Ms. Michelle McClure, who was unable to attend the Workshop. Mr.

Simcock presented the outcome of the breakout group that discussed this chapter at the regional Workshops held in Koror, Palau, and in Valletta, Malta, in August 2018, as well as in the regional workshop held in Odessa, Ukraine, in October 2018, respectively. Mr. Simcock noted that there was no regional analysis of capture fisheries in WOA I, and highlighted the importance of key documents, such as the Food and Agriculture Organization's State of World Fisheries and Aquaculture (SOFIA), as well as the information provided by regional organizations. He also noted that since the release of WOA I, more information had become available on gender in fisheries and aquaculture. Mr. Simcock noted that climate change and other impacts are currently having an impact on the way fishers work.

Breakout group report and plenary discussions

Ms. Fernanda De Oliveira Lana gave a presentation on the discussions in the breakout group on chapter 15. It was noted that the group, among other things, discussed the various aspects of IUU fishing in the region.

Ms. Lana noted that it was agreed that the chapter be developed around the following key points/considerations, namely:

- The reporting standard should reflect the latest data and timeline of reporting used for the FAO's State of World Fisheries and Aquaculture report (SOFIA);
- The importance of including, not only the IUU fishing, but also issues-related to small-scale fishing as well as the parameters of data collection and quantification of fish stocks;
- In relation to consumption of fish by humans, the need to not only include consumption for food, but also other uses, such as cosmetics and/or manufacturing of leather goods; and

Ms. Lana also noted that the group agreed that additional data to support the second world ocean assessment would be exchanged.

(vi) Chapter 21: "Trends in inputs of anthropogenic noise to the marine environment" (Karen Evans)

Since experts on this topic were not able to participate in this regional Workshop, it was decided that this chapter would not be discussed in the Workshop.

(vii) Chapter 24: "Development in tourism and recreation activities" (Alan Simcock)

Mr. Alan Simcock gave a brief presentation on chapter 24 on "Development in tourism and recreation activities". While noting that this topic had been dealt with in chapter 27 of WOA I, he listed coastal construction, waste and sewage, beach and shore usage, enjoyment of wild life, and boating and personal leisure transport, among the major pressures on the environment. It was noted that this chapter has links with chapter 8 which deals with human society, chapters 10 and 11, which deal with sewage and waste, chapter 14 which deals with coastal and marine infrastructure, chapter 15

which deals with fisheries, chapter 23 which deals with cruise ships, and chapter 23 which deals with boating of WOA I. In the ensuing discussions, including in relation to additional issues that could be covered, the importance of the perspective of indigenous peoples was raised. The difficulty of including the regional priorities and issues in this chapter was also noted. While noting the impacts of recreational activities on the environment, the importance of taking into consideration the impact of the environment (e.g. Tsunami, shark attacks) on the activities was also stressed.

Breakout group report and plenary discussions

Mr. Alan Simcock gave a presentation on the discussions in the breakout group on chapter 24. While noting that this chapter would be different from the similar chapter in WOA I, he highlighted the concern of damage to coral reefs from cruise ships. As regards the regional aspect, while it was noted that cruise ships are not a significant occurrence in the Indian Ocean, the importance of considering the activity of whale shark watching in the eastern part of Indonesia was stressed. The tensions between tourism demands and environmental conservation on Komodo Island was noted as an important issue for consideration. In the ensuing discussions, it was noted that there were many cruises on the west coast of Australia, and also around Seychelles and Mauritius. It was also noted that the practice of whale shark watching was practiced in Sri Lanka, as well as in certain parts of Australia.

E. Consideration of important issues in other chapters and discussion of issues on other chapters

No presentations were made under this agenda item.

F. Consideration of learning points/needs and resources that may be relevant to the inventory of capacity-building opportunities relevant for the Regular Process being compiled and maintained by the secretariat, and to the multistakeholder dialogue (case studies of good practices) and capacity-building partnership event, to be held in early 2019

Mr. Marco Boccia provided information on capacity-building under the Regular Process, noting that it is one of the core objectives of the Regular Process. He noted that participants attending the first round of regional workshops held in 2017 identified capacity-building as an important element for the Process. It was noted that a fully-searchable capacity-building inventory has been compiled and continues to be updated on the website of the Division. It was also noted that a two-day multistakeholder dialogue (with case studies of good practices) and capacity-building partnership event ("the Event") would be held in New York in early 2019 to build awareness on the Regular Process and the science-policy interface at all levels, while allowing for in-depth multi-stakeholder dialogues on current opportunities, gaps and needs in capacity, as well as building capacity to participate in, and make use of, assessments.

The importance of increasing the number of National Focal Points was emphasized, it being noted that they were important for, among other things, assisting with the nomination of experts to the Pool of Experts, as well as awareness-raising and

outreach concerning the Regular Process. Moreover, the importance of filling the geographic and capacity gaps with respect to the composition of the Pool of Experts was also highlighted. In this regard, it was noted that out of more than 570 members of the Pool of Experts there were less from developing countries, and less than half were women. It was also noted that some gaps in expertise were in part due to a lack of available courses of study/academic courses in certain topics, particularly those related to the socioeconomic aspects of ocean issues.

ANNEX 1: Guidelines for the second round of Workshops in 2018 to Assist the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects

Purpose and objectives

- 1. 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 for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, ⁵ and endorsed by the General Assembly, ⁶ includes in the activities for 2018 the holding of a second round of regional workshops to, *inter alia*, inform the collection of regional-level information and data for the preparation of the second world ocean assessment, to build capacity and to facilitate outreach and awareness-raising. ⁷ These Guidelines apply to the second round of regional workshops and are intended to give guidance for the arrangements for such workshops.
- 2. The objectives of each of these workshops should therefore be to:
- (a) Support the development of the second world ocean assessment by enabling the collection of regional-level information and data for the preparation of the second world ocean assessment and to enable relevant members of writing teams for specified chapters⁸ to meet, and to interact with experts from the region in the fields covered by those chapters;
- (b) Enable the regional experts to understand better the approaches of the Regular Process and to develop their skills in integrated assessment, covering environmental, social and economic aspects;
- (c) Enable the writing teams for the chapters selected for the workshop, with the help of the Joint Coordinators and the members of the Group of Experts of the Regular Process ("the Group of Experts") who are present, to discuss the structure of their chapter, its relationship with the other chapters of the Outline for the second world ocean assessment ("the Outline") and responsibilities for developing the chapter text;
- (d) Provide opportunities for the members of the Group of Experts present to highlight important issues within the Outline other than those of the selected chapters, in order to broaden understanding of the full range of the Regular Process;
- (e) Consider what learning points / needs and resources may be relevant to the inventory of capacity-building inventory of needs and opportunities relevant for the Regular Process being compiled and maintained by the secretariat, and to the multistakeholder dialogue (case studies of good practices) and capacity-building partnership event, to be held in early 2019.

⁵ See the attachment to A/71/362.

⁶ See General Assembly resolution 71/257, paragraph 299.

⁷ See, inter alia, paragraphs 9 (c) and 13 (b) of the Programme of Work 2017-2020, attachment to A/71/362.

⁸ Where a separate writing team is established for a section of a chapter, this section may be treated as a chapter for the purpose of these guidelines.

- (f) Consider what capacity-building steps might be taken, both at global and regional levels, in relation to the issues covered by the selected chapters.
- 3. The Group of Experts will inform the Bureau of the Ad Hoc Working Group of the Whole ("the Bureau"), for its consideration, of the chapters which will be the focus of each regional workshop.

Number and locations

- 4. States, relevant organizations, bodies, funds or programmes within the United Nations system and intergovernmental regional organizations are invited to offer to host workshops in 2018 for the following ocean areas:
- (a) The North Pacific;
- (b) The South Pacific;
- (c) The Indian Ocean (including the Arabian Sea and the Bay of Bengal), the Red Sea and Gulf of Aden and the ROPME/RECOFI area;⁹
- (d) The North Atlantic, the Baltic Sea, the Mediterranean Sea and the Black Sea; and
- (e) The South Atlantic (between the African and American coasts) and the wider Caribbean.
- 5. Separate workshops will not be held for the Arctic Ocean or the Southern Ocean. Instead, correspondence which was initiated during the first round of regional workshops in 2017, will continue between the relevant international bodies and forums for those areas (in particular, the Antarctic Treaty System and the Arctic Council) and the Group of Experts of the Regular Process to enable those bodies and forums to contribute their views on the issues relevant to the workshops. If requested, members of the Group of Experts and Pool of Experts will make themselves available for consultation.
- 6. To the extent that resources permit, one or two further meetings of writing teams may be held during the first half of 2019 where the Bureau considers it desirable to do so. The themes of such meetings will be determined by the Bureau on the basis of recommendations from the Group of Experts.

Timing

- 7. Seven possible time-slots have been identified for workshops to be held between June and December 2018:
- (a) 25 29 June, 2018;
- (b) 2-27 July, 2018;
- (c) 30 July 10 August, 2018;
- (d) 24 28 September, 2018;
- (e) 15 26 October, 2018;

⁹ Regional Organization for the Protection of the Marine Environment (ROPME) Members: Bahrain, Iran (Islamic Republic of), Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. Regional Commission for Fisheries (RECOFI) Members: Bahrain, Iran (Islamic Republic of), Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.

- (f) 5 9 November, 2018;
- (g) 26 30 November, 2018.

These Guidelines will be supplemented by details regarding the format of the workshops and the proposed composition and structure of the meetings of the writing teams.

8. Potential hosts are invited to indicate within which of these time periods they would wish to host a workshop.

Activities of workshops

9. The agenda of a workshop to support the Regular Process should reflect the objectives set out in paragraph 2 above. The activities of a workshop should take full account of the principles for the Regular Process recommended by the Ad Hoc Working Group of the Whole and endorsed by the United Nations General Assembly in 2009 and reaffirmed by the United Nations General Assembly in 2016, 10 and the various recommendations of the Ad Hoc Working Group of the Whole.

Hosts

10. Workshops are to be hosted by Member States, members of United Nations specialized agencies and relevant organizations, bodies, funds or programmes within the United Nations system. They are to be organized under the auspices of the United Nations, ¹¹ in coordination with the secretariat of the Regular Process and with the assistance of members of the Group of Experts and Pool of Experts, as appropriate. For the organization of such workshops, as they affect these regions, hosts may request the cooperation of relevant regional intergovernmental organizations and/or that of relevant national scientific institutions.

Participation

- 11. Member States of the United Nations, members of United Nations specialized agencies and relevant organizations, bodies, funds or programmes within the United Nations system, shall be entitled to participate in any workshop that they consider relevant to them, up to the number of available places. Relevant regional intergovernmental organizations in the region are encouraged to participate, including regional seas organizations, regional fisheries management organizations and arrangements, relevant regional intergovernmental marine science organizations and intergovernmental organizations and arrangements undertaking work in relation to large marine ecosystems. For practical reasons, the logistics and the number of invitees will need to be managed by the host in consultation with the secretariat of the Regular Process, as well as in consultation with the Bureau, as appropriate. Member States should consider arranging for their National Focal Points for the Regular Process to assist with identification of participants for regional workshops and the organization of such workshops as required, and where possible, to participate in relevant workshops.
- 12. Non-governmental organizations in consultative status with the Economic and Social Council or with Convention secretariats, relevant non-governmental organizations which accredited to the United Nations Conference on Sustainable

¹⁰ See A/64/347, annex, and paragraph 285 of General Assembly resolution 71/257.

¹¹ Such workshops will require the conclusion of a host country agreement.

Development ("Rio + 20") or which participated in the United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development ("United Nations Oceans Conference") in accordance with General Assembly resolution 70/303: Modalities for the United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, relevant scientific institutions and organizations representing major groups as defined in Agenda 21 may request invitations to participate in the workshops. Relevant regional marine science institutions and organizations and relevant regional arrangements undertaking work in relation to large marine ecosystems are particularly encouraged to participate. The organizations, arrangements and institutions referred to in this paragraph should be those active in ocean affairs and marine science whose participation can help advance the work and objectives of the Regular Process. Hosts may reserve a number of places in the workshop to be filled by such invitations.

- 13. Each workshop should include at least one member of the Group of Experts, one member of the Pool of Experts, as appropriate, and one member of the secretariat of the Regular Process, which will be coordinated with the secretariat of the Regular Process. The Joint Coordinators of the Group of Experts will be invited to participate in all the workshops. If possible, all members of the Group of Experts from States in the area covered by the workshop should participate. The Lead Members from the Group of Experts for the chapters selected for the workshop as well as relevant members of the writing teams should also be invited to participate. The participation of the members of the Group of Experts and of the Pool of Experts, as appropriate, from developing countries from the region and the Joint Coordinator from the developing country, as well as that of the relevant members of the writing teams, will be supported within the provision made in the regular budget of the United Nations for 2018/2019.
- 14. Hosts may, as appropriate, encourage the participation of relevant members of the Pool of Experts, including their attendance in the regional workshops and seeking their input on organization, networking, and substantive input to the preparation and review of the outcome of the workshops. Preference should be given to experts in the fields covered by chapters selected for the workshop.

Chair and secretariat

- 15. Hosts should designate a chair (or co-chairs) of the workshop, who will be expected to take responsibility for summarizing the outcomes of the workshop with the aid of the workshop support staff and members of the Group of Experts. Hosts may consider inviting a member of the Group of Experts and, as appropriate of the Pool of Experts, to be the chair, or a co-chair, of the workshop. Hosts may provide guidance, where needed, on what the priorities for the region are, as well as on potential participants and other modalities for the workshops.
- 16. Hosts should provide support staff to organize proceedings in consultation with the secretariat of the Regular Process and the members of the Group of Experts and, as appropriate, of the Pool of Experts, who are taking part, and to help the chair(s), the member(s) of the Group of Experts and the secretariat to provide a summary of the outcome.

Output of workshops

- 17. The output of the workshop should take the form of:
- (a) Notes by the writing teams on the issues discussed in relation to each of the chapters selected for the workshop. To deliver these, each writing team should be asked to designate one of its members to take responsibility for the production of these notes;
- (b) A summary of other discussions and presentations taking place in the workshop. The member(s) of the Group of Experts, of the Pool of Experts, as appropriate, and the secretariat of the Regular Process will help to produce this summary. Provision should be made for the participants to comment on a draft of the summary and for the final version to be revised by the chair(s) and representative(s) of the Group of Experts and of the Pool of Experts, as appropriate, in the light of such comments.
- 18. The secretariat of the Regular Process will play an important role in ensuring that the output of each workshop is captured and presented in a way which will support the work of the second cycle of the Regular Process.
- 19. Those functions would include capturing the relevant information presented (directly and indirectly) during the workshops, including regional/national informational needs with respect to the Regular Process and its outputs.
- 20. The secretariat would also assist in the preparation of the summary of discussions. It would also be responsible for the development and adaptation of the outreach materials relevant to the Regular Process and its outputs.
- 21. The division of work in preparing the written output of each workshop should be agreed between the host and the secretariat of the Regular Process, in consultation with the member(s) of the Group of Experts and of the Pool of Experts, as appropriate.

Follow-up to the workshops

- 22. The final version of the summary of discussions, which could include (subject to the discretion of the relevant writing team) the notes on specific chapters, should be made publicly available on the Regular Process website.
- 23. The secretariat of the Regular Process should ensure that liaison continues after the workshop with bodies that have contributed to it and with National Focal Points in the region. In particular, the secretariat should seek to facilitate follow-up on capacity-building possibilities identified by the workshop both with respect to the further clarification of needs as well as the identification of best practices.

ANNEX 2: Draft agenda

Workshop in Support of the Second Cycle of the Regular Process

Annex 1, Draft Agenda

Bali, Indonesia, 8 – 9 November 2018

- 1. Welcome and opening remarks by representatives of the Maltese Government and of the United Nations Secretariat Division of Ocean Affairs and Law of the Sea and the Co-Chairs of the Workshop.
- 2. Adoption of Agenda for the Workshop.
- 3. Presentation by one of the Joint Coordinators of the Group of Experts of the Regular Process of the Outline for World Ocean Assessment 2 and the Timetable and Implementation Plan, and discussion of general issues related to them.
- 4. Review of the outcome of the Workshop for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area, held in Zanzibar, United Republic of Tanzania in December 2017:
 - (a) Introduction by one of the Co-Chairs of that Workshop;
 - (b) Consideration of regional information sources identified in that Workshop and progress in making them available for the second world ocean assessment;
 - (c) Consideration of further information sources that might be made available;
 - (d) Discussion of other aspects of the report of the outcome of the Workshop.
- 5. Presentation by one of the Joint Coordinators of the intended structure of the various chapters (and sections of chapters) of the second world ocean assessment, namely:
 - (a) A one-paragraph abstract of the chapter or section;
 - (b) A very short summary of the situation recorded in the First Global Integrated Marine Assessment (World Ocean Assessment I);
 - (c) A description of environmental changes between 2010 and 2020;
 - (d) A description of the economic and social consequences and/or of the other economic or social changes (including, where appropriate, changes in global distribution of benefits and disbenefits and issues relating to concepts of natural capital);
 - (e) A description of the main information gaps in relation to the subject matter;
 - (f) A description of the main capacity-building gaps in the field
- 6. Consideration in the light of this structure for selected chapters and sections of chapters of the Outline for the second world ocean assessment, including possible chapter frameworks. These discussions may take place in parallel groups and should review the substance of the following chapters and related capacity-building needs:

- (a) Chapter 6: Trends in the biodiversity of main taxa of marine biota (discussion led by Chul Park);
- (b) Chapter 8: Trends in the state of human society in relation to the ocean:
- (a) Coastal communities; (b) Human health as affected by the ocean; (c) Maritime industries; (d) Maritime cultural services (discussion led by Alan Simcock and Anastasia Strati);
- (c) Chapter 11: Changes in liquid and atmospheric inputs to the marine environment from land (including through groundwater), ships and offshore installations: (a) Persistent organic pollutants (including run-off from the use of agricultural pesticides); (b) Metals; (c) Radioactive substances (including naturally occurring radioactive material (NORM); (d)Personal care products, pharmaceuticals and nutraceuticals; (e) Atmospheric pollutants (NOx (but not in its role as a nutrient) and SOx); (f) Hydrocarbons from terrestrial sources, ships and offshore installations (including arrangements for response to spills and discharges); (g) Other substances used on, and discharged from, offshore installations; (h) Distribution of, and trends in, contaminant concentrations (discussion led by Maria Bebianno and Alan Simcock);
- (d) Chapter 15: Changes in capture fisheries and harvesting of wild marine invertebrates (discussion led by Michelle McClure and Essam Mohammed);
- (e) Chapter 26: Developments in exploration and use of marine genetic resources (discussion led by Sanae Chiba).
- 7. Presentation on important issues in other chapters that members of the Group of Experts present wish to emphasise and discussion of issues on other chapters that the members of the Workshop wish to raise.
- 8. Presentation by a member of the Group of Experts of the Regular Process on integrated assessment covering environmental, social and economic aspects.
- 9. Consideration of what learning points/needs and resources may be relevant to the inventory of capacity-building opportunities relevant for the Regular Process being compiled and maintained by the secretariat, and to the multi-stakeholder dialogue (case studies of good practices) and capacity-building partnership event, to be held on 23-24 January 2019.
- 10. Overview of the outcome of the Workshop presented by the Co-Chairs and the Joint Coordinators.
- 11. Closure of the Workshop.

ANNEX 3: List of Participants

#	TITLE	FIRST NAME	LAST NAME	COUNTRY / ORGANIZATION
1	Mr.	Ayodhia	Kalake	(Chair) Coordinating Ministry for Maritime Affairs
2	Mr.	Tukul Rameyo	Adi	Indonesia / Coordinating Ministry for Maritime Affairs
3	Mr.	Ahmed	Alaarmi	Saudi Arabia / The General Authority of Mererology and Environmental
4	Mr.	Abdurahman	Aljuhany	Saudi Arabia / Ministry of Environment, Water and Agriculture
5	Ms.	Maria Ana	Almeida Colaço	Portugal / MARE-Açores; OKEANOS- Açores/Instituto do MAR (Video Conf)
6	Mr.	Emidio	Andre	Mozambique / Instituto Nacional de Investigação Pesqueira
7	Mr.	Basilio	Araujo	Indonesia / Coordinating Ministry for Maritime Affairs
8	Mr.	Muhammad	Ardhi	JME Consulting
9	Ms.	Lauti Nia	Astri	Indonesia / Ministry of Foreign Affairs
10	Mr.	Hossein Hassan	Bakhshayesh Ardestani	Iran / Iran Fisheries Organization
11	Ms.	Maria	Bebianno	Portugal / University of Algarve (Video Conf)
12	Ms.	M. Burhanudin	Borut	Indonesia / Coordinating Ministry for Maritime Affairs
13	Mr.	Minh	Bui Cong	Viet Nam / Ministry of Natural Resources and Environment
14	Mr.	Ian	Butler	Australia / Coral Research Consultant, Australian Fisheries Management Authority
15	Mr.	Firdaus	Dahlan	Indonesia / Ministry of Foreign Affairs
16	Ms.	Fernanda	De Oliveira Lana	Brazil / Federal Fluminense University

17	Ms.	Agustina	Effendi	Indonesia / Coordinating Ministry for Maritime Affairs
18	Mr.	Tri	Ernawati	Indonesia / Ministry of Marine Affairs and Fisheries
19	Ms.	Karen	Evans	Australia / CSIRO Oceans and Atmosphere
20	Mr.	Adan Arbahim	Hassan	Djibouti / Direction de la Peche du Ministere de l'Agriculture, de l'Eau, de la Peche, de l'Elevage et des Resources Halieutiques
21	Ms.	Nani	Herdiati	CCMA - Indonesia
22	Ms.	Forgive	Hove	Zimbabwe / Ministry of Justice and Parliamentary Affairs
23	Ms.	Alnazry	Hussain	Saudi Arabia / Ministry of Environment, Water and Agriculture
24	Mr.	Karimollah	Jahandideh	Iran / Iran Fisheries Organization
25	Mr.	Nirmal	Kafle	Nepal / Permanent Mission of Nepal to the United Nations
26	Mr.	Keh Osman	Kamara	Sierra Leone / Group of Experts of the Regular Process
27	Mr.	Hatim Alzien Hassaballa	Kejagla	Sudan / Ministry of Animal Resources, Fisheries and Wildlife, Directorate General of Fisheries
28	Mr.	Dyah	Kusumastuti	Indonesia / The Cabinet Secretariat
29	Ms.	Sora	Lokita	Indonesia / Coordinating Ministry for Maritime Affairs
30	Mr.	Sérgio Manuel	Machado Jesus	Portugal / Universidade do Algarve
31	Mr.	Odo	Manuhutu	Indonesia / Coordinating Ministry for Maritime Affairs
32	Mr.	Hun	Marady	Cambodia / General Directorate of Administration for Nature Conservation and Protection, Ministry of Environment
33	Mr.	Moamer	Mohamed	Sudan / Faculty of Marine Science and Fisheries
34	Mr.	Umi	Muawanah	Indonesia / Ministry of Marine Affairs and Fisheries

35	Mr.	Abdul	Muhari	Indonesia / Ministry of Marine Affairs and Fisheries
36	Mr.	Thao	Nguyen Thanh	Viet Nam / Administration of Seas and Islands, Ministry of Natural Resources and Environment
37	Mr.	Kim	Nong	Cambodia / General Directorate of Administration for Nature Conservation and Protection, Ministry of Environment
38	Mr.	Budi	Purwanto	Indonesia / Coordinating Ministry for Maritime Affairs
39	Ms.	Dessy	Rahmayanti	Indonesia / Coordinating Ministry for Maritime Affairs
40	Mr.	Jean Edmond	Randrianantenaina	Madagascar
41	Ms.	Emma	Rochina	Indonesia / University of Padjajaran (UNPAD)
42	Mr.	Renison	Ruwa	Kenya / Marine and Fisheries Research Institute
43	Ms.	Purbaya Yudhi	Sadewa	Indonesia / Coordinating Ministry for Maritime Affairs
44	Mr.	Alan	Simcock	United Kingdom of Great Britain and Northern Ireland / Joint Coordinator, Group of Experts
45	Ms.	Raden Achmad Gusman	Siswandi	Indonesia / University of Padjajaran (UNPAD)
46	Ms.	Lingga Kartika	Suyud	Indonesia / University of Padjajaran (UNPAD)
47	Mr.	Thomas	Therriault	Canada / Department of Fisheries and Oceans (DFO)
48	Ms.	Desri	Yanti	Indonesia / Ministry of Marine Affairs and Fisheries
49	Mr.	Marco	Boccia	(Secretariat) United Nations Division for Ocean Affairs and the Law of the Sea

^{*}The Workshop was also attended by Mr. Ambariyanto from the Diponegoro University, Indonesia, Ms. Dwiyitno from the Research Center for Marine and Fisheries Product and Biotechnology, Indonesia, Ms. Isni and Mr. Yuniarti from the University of Padjajaran (UNPAD), Indonesia, and Ms. Nurhayadi from the Coordinating Ministry for Maritime Affairs, Indonesia.