

## **REGULAR PROCESS FOR THE GLOBAL REPORTING AND ASSESSMENT OF THE STATE OF THE MARINE ENVIRONMENT, INCLUDING SOCIOECONOMIC ISSUES**

### **Elements for discussion on the scope and structure of the assessment (or assessments) to be carried out in the second cycle of the Regular Process**

1. This document aims to bring together the issues that need to be considered in reaching a decision on the assessment (or assessments) to be completed by the end of 2020 during the second cycle of the Regular Process for the Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (the “Regular Process”).

#### **What has so far been decided**

2. In 2009, the Ad Hoc Working Group of the Whole for the Regular Process (the “Ad Hoc Working Group of the Whole”) recommended that “In the first cycle, the scope of the regular process would focus on establishing a baseline. In subsequent cycles, the scope of the regular process would extend to evaluating trends”<sup>1</sup>. This recommendation was endorsed by the General Assembly<sup>2</sup>.

3. In 2016, the General Assembly through its resolution 71/257 recalled that, in the first cycle, the scope of the Regular Process focused on establishing a baseline, and decided that “the scope of the second cycle would extend to evaluating trends and identifying gaps”, and “that the second cycle would cover five years, from 2016 to 2020; the General Assembly also endorsed the recommendations of the Ad Hoc Working Group of the Whole at its seventh meeting (3 to 9 August 2016), and requested the Bureau to continue to put into practice the decisions and guidance of the Ad Hoc Working Group of the Whole during the intersessional period, including by providing oversight of the delivery of the programme of work for the period 2017-2020 for the second cycle of the Regular Process”<sup>3</sup>.

4. The programme of work sets out the first output of the second cycle as follows: “Output I – second World Ocean Assessment(s): Building on the baselines established by the First Global Integrated Marine Assessment, the Group of Experts will prepare assessment(s). The process will begin with a scoping exercise in January 2017. The assessment(s) would be finalized by late 2020. The scoping exercise and the preparation of the assessment(s) would be supported through regional workshops that will, among other things, help to identify regional priorities.”

5. Under the Terms of Reference and Working Methods of the Group of Experts for the second cycle of the Regular Process approved by the Ad Hoc Working Group of the Whole at its eighth meeting (17 to 18 April 2017), decisions on what assessments shall be carried out require the approval of the General Assembly. The scoping exercise referred to in the programme of work will lead up to those decisions, and will reflect discussions in the Ad Hoc Working Group of the Whole and the regional workshops to be held by the end of 2017.

#### **Process**

6. The ninth meeting of the Ad Hoc Working Group of the Whole (6 to 8 September 2017) will include in its discussions the consideration of the scope and structure of the assessment(s) to be prepared by 2020.

7. Provision has been made for five regional workshops (for the North Atlantic (including the Baltic, Black, Mediterranean and North Seas), the South Atlantic (including the Wider Caribbean), the North Pacific, the South Pacific and the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area<sup>4</sup>. Preparations are under way with respect to the holding of these workshops as follows: for the North and South Atlantic, in mid-September 2017 in Lisbon, Portugal; for the South Atlantic (between the African and American coasts) and the wider Caribbean, in mid-

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<sup>1</sup> A/64/347, paragraph 19.

<sup>2</sup> General Assembly resolution 64/71, paragraph 177.

<sup>3</sup> General Assembly resolution 71/257, paragraphs 294, 297 and 298.

<sup>4</sup> 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.

November 2017 in Santa Catarina, Brazil; for the North Pacific at the end of November 2017 (venue to be determined); and for the Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area, in early December 2017, in [Nairobi], Kenya. Consultations are still in progress to identify a host for the South Pacific. Separate workshops will not be held for the Arctic Ocean or the Southern Ocean. Instead, the relevant international bodies and forums for those areas (in particular, the Antarctic Treaty System and the Arctic Council) will be invited to consider, and to contribute their views on the issues proposed for the workshops as they affect these regions.

8. The Guidelines for the first round of Workshops in 2017 to Assist the Regular Process include the objective of “Enabl[ing] participants to put forward their views on the scope and structure that should be adopted for the assessment or assessments to be prepared in the second cycle of the Regular Process, which is/are to be completed by the end of 2020”. The discussions in the Ad Hoc Working Group of the Whole in September 2017 will therefore be only preliminary.

9. Under the Guidelines, the workshops are to take into account “Material provided by the Group of Experts of the Regular Process and/or the Ad Hoc Working Group of the Whole on a possible framework for the assessment(s) of the second cycle of the Regular Process”. The current document is intended to provide this material. The conclusions of the regional workshops will be recorded for input into decisions on the scope and structure of assessments in the second cycle.

10. This process implies that the Group of Experts would prepare proposals for the scope and structure of the 2020 assessment(s) for the Ad Hoc Working Group of the Whole to approve in early 2018, taking into account the discussions in the Ad Hoc Working Group and the reports of the regional workshops. These proposals would be accompanied by a draft implementation plan and timetable for the assessment(s), to be developed by the Group of Experts and the secretariat of the Regular Process also in the light of provisions made in the United Nations Regular Budget for the 2018-2019 biennium. The draft implementation plan will include a provision for a second round of five regional workshops as well as for meetings of the writing teams as outlined in the programme of work. A meeting of the Ad Hoc Working Group of the Whole would be necessary soon thereafter to determine, on the basis of these proposals, the preferred scope and structure, in order to allow the work of preparing the assessment(s) to be planned and implemented in good time. The timing of this meeting will be discussed by the ninth meeting of the Ad Hoc Working Group of the Whole in September 2017 during its consideration of the recommendations it will provide to the seventy-second session of the General Assembly.

### **Substance**

11. The first question to be resolved is whether there should be one or more assessments as Output I of the second cycle of the Regular Process. There is a strong case that at least one assessment should be a comprehensive review of the trends in what is happening to the marine environment as a whole since the early part of the 2010s, when the data for most of the First Global Integrated Marine Assessment (“World Ocean Assessment I”) was assembled. This case rests on the intention that the Regular Process should provide a series of *integrated* assessments of the state of the world ocean: only a comprehensive review can continue what has been started by World Ocean Assessment I. Such a review would need to look at significant changes in drivers, pressures, states, impacts and responses. Where appropriate, the review could consider a number of possible future scenarios. It is only through such a comprehensive review that the Regular Process can deliver the intention of monitoring all aspects of the sustainable use of the ocean – environmental, social and economic and their interactions. That does not, however, prevent the development in the period 2018 – 2020 of specific assessments on particular issues, to cover other issues that were not investigated as fully as they might have been in World Ocean Assessment I.

12. The second question is then the scale of the next comprehensive assessment. World Ocean Assessment I in its final, printed form covered approximately 1,000 pages. This was considerably more than the original aim of 700 pages (“7/10ths of the planet in 700 pages”). The next comprehensive assessment should be substantially smaller, since its aim is to show trends, rather than provide a comprehensive overview of the baselines showing the current state of the marine environment.

13. The third question is then the structure. World Ocean Assessment I had what could be called a “cubist” structure, in that it assessed the ocean from three points of view simultaneously (in a way analogous to cubist art, which “brought different views of subjects...together in the same picture”). The three viewpoints were ecosystem services (often now called “benefits to humans” in some contexts), pressures from human activities and habitats (which covered also biodiversity and species).

One result of this approach was that relevant material could be found in several different places. Only in Part I – Summary was it possible to attempt to bring the different facets together.

14. The less-than-desired integration achieved in World Ocean Assessment I is therefore a strong argument to try to improve the integration of comprehensive assessment of the second cycle. This would argue against an approach which tried to up-date, and show the trends for, each of the chapters of World Ocean Assessment I individually. Integration of spatial and temporal trends in biological, chemical, ecosystem, physical (including atmospheric) ocean variables with socio-economic variables as well as and, more generally, the reciprocal impacts on each other of humans and the ocean should be core objectives of the next comprehensive assessment. To achieve an integrated assessment, it will help to pull together the ecosystem services and benefits produced by each aspect of the ocean to show the distribution around the world of such services and benefits, and to discuss more fully than was possible in World Ocean Assessment I the factors affecting socio-economic issues and the distribution of ecosystem services and anticipated changes in those services. Achieving this will require a wide range of expertise, involving economists, natural scientists of all relevant disciplines and sociologists. Geographical representation will also need to be ensured, as will due consideration regarding gender.

15. One approach that could permit the achievement of such an outcome would be to look at the various aspects of the ocean primarily through four main facets, which would incorporate the relevant socio-economic aspects:

- (a) ***The ocean and its circulation:*** This facet would look at changes affecting the ocean water-column as a whole – ocean currents and the thermohaline circulation, sea temperature and sea-level rise. It would also consider the socio-economic implications of those changes. It could also consider the value of regional predictive oceanographic models;
- (b) ***The food web:*** This facet would consider the conditions under which primary production occurs, the developments in primary production (including our understanding of it), the way in which energy is passed up the food web from prey to predators (both vertebrate and invertebrate and commercial and non-commercial species), developments in the status of top predators, in human impacts on, and acquisition and use of, food from the sea and the impact on humans of oceanic adjustments to human activities.;
- (c) ***The coastal and shelf seas:*** This facet would focus on developments in the many uses that are made of the coastal and shelf seas, especially considering (potentially) conflicting uses of the marine space, together with the processes (water quality, erosion, land reclamation etc), drivers and pressures that affect those uses. The linkage would focus particularly on the potential conflicts in the use of the marine space in the coastal and shelf seas;
- (d) ***The open ocean:*** In World Ocean Assessment I, discussion of the open ocean (that is, the area beyond the edges of the geomorphic continental shelves) was divided between many chapters. This facet would therefore look at changes in the various aspects of the open ocean. This would cover both the upper waters (down to about 200 metres (the general limit of light penetration and therefore of photosynthesis) and the deep sea and seabed.

16. Within this overall structure, each chapter on each facet would need to have five sections:

- (a) A very short executive summary outlining the main threats, challenges and opportunities uncovered in the analysis undertaken in the chapter.
- (b) A very short summary of the relevant findings of World Ocean Assessment I (in order to enable the rest of the chapter to be placed in the correct context);
- (c) A description of developments in the ocean (including our understanding of it) since about 2010;
- (d) An evaluation of the ecosystem services and benefits arising from the facets of the ocean considered in the chapter;
- (e) A description of developments in the social aspects of those facets of the ocean;
- (f) An evaluation of developments in factors affecting the distribution around the world of the impact of those developments in ecosystem services and benefits and social aspects.

17. The proposals from the Group of Experts for the scope and structure of the next comprehensive assessment will need to spell out, chapter by chapter, on the basis of the reports from the regional workshops and other inputs, the linkages to be examined in that chapter among chemical, ecosystem, physical and socio-economic variables. Identifying these linkages will be an important task for the regional workshops and other consultations (for example, of regional seas organizations and regional fisheries bodies).

18. A table showing a possible way of structuring an assessment under this approach is at Annex A. The elements in this table are intended simply to show how issues might be allocated. They are not intended to be a full description of the structure and scope of the next comprehensive assessment: that will be provided, on the basis of the reports of the regional workshops and other consultations, in the proposals of the Group of Experts in early 2018 on the scope and structure of that assessment.

19. In all this, it will be important to aim to establish indicators, which can be used in the second cycle (and future cycles) to illustrate trends. It will also be necessary to find ways of better linking data from the natural sciences with socio-economic data. Part of the process of deciding the scope and structure of the assessments under the second cycle will be the identification of suitable indicators. Such indicators can be based on:

- (a) Existing time series that are already published;
- (b) Existing coherent collections of data (including time series not yet long enough to allow trends to be demonstrated) which can further developed;
- (c) Assembling data from disparate sources (which requires an understanding of how the different sources are related to each other);
- (d) Suggestions for novel data collections, as appropriate.

In developing such indicators, regional organizations (and national authorities of States not forming part of a regional organization) should be consulted in order to maximise the ability to make comparisons between regions.

20. It will be essential to ensure that all such indicators are aligned with other global and regional instruments, processes and mechanisms, (including the 2030 Agenda on Sustainable Development, the Convention on Biological Diversity, the Intergovernmental Panel on Biodiversity and Ecosystem Services (Ipbes), the Global Ocean Observing System, and the Ocean Biogeographic Information System (OBIS)), so that effort is not duplicated and that the next comprehensive assessment is complementary to relevant intergovernmental processes. To promote the usefulness of the next comprehensive assessment, it will be important to clarify what information in which chapters is relevant to each of the various processes within the United Nations family. This will include explaining, as far as possible, the information relevant to the different areas of the ocean covered by differing terms or definitions in scientific (geomorphic) terminology and the legal terminology of the law of the sea. It may also be helpful to produce, alongside the next comprehensive assessment, technical abstracts (such as those produced in 2017 for World Ocean Assessment I) focused on the specific interests of other global processes.

21. In view of the United Nations' Sustainable Development Goal (SDG) 14 (Conserve and sustainably use the oceans, seas and marine resources) and related Sustainable Development Goals, it would also be appropriate to include a summary of changes in marine systems in relation to the targets of the SDGs. It would not be appropriate to use these targets as the sole framework for the whole of the comprehensive review of the state of the marine environment, since not all aspects of the ocean are explicitly covered in the SDG. Indicators being developed for the SDGs, however, will be useful for assessing trends in the fields that they cover.

## **Conclusion**

22. It will help if discussions in the regional workshops consider:

- (a) The structure of an assessment of trends in the status of marine systems and their components;
- (b) Appropriate indicators of those trends;
- (c) Available data sources for analysis for changes in the marine environment;

- (d) Gaps in World Ocean Assessment I that should be addressed in the second cycle; and
- (e) Key applications for Output I of the second cycle of the Regular Process.

**ELEMENTS FOR A POSSIBLE STRUCTURE OF A GLOBAL OCEAN ASSESSMENT  
FOR THE SECOND CYCLE OF THE REGULAR PROCESS**

<b>PART 1 – SUMMARY</b>		
1.1 An overall summary based principally on the summaries that will be the first element in each chapter of Parts 2 – 5.		
1.2 A summary of progress towards the targets of Sustainable Development Goal 14 and other related Sustainable Development Goals		
<b>PART 2 – THE OCEAN AND ITS GENERAL ECO SYSTEM SERVICES</b>		
Descriptions (with sections on the different regions where necessary and an initial very short summary) of the position shown in World Ocean Assessment I (also very short) and developments in 2010 – 2020, including in the main ecosystem services and benefits arising, trends in the distribution and abundance around the world of those ecosystem services and benefits and the ensuing consequences to human systems (both social and economic) of those changes in respect of:		
2.1 Ocean currents and the thermohaline circulation		
2.2 Sea temperature		
2.3 Sea-level rise		
2.4 Ocean acidification		
<b>PART 3 – THE FOOD WEB</b>	<b>PART 4 – COASTAL AND SHELF SEAS</b>	<b>PART 5 – THE OPEN OCEAN</b>
Descriptions (with sections on the different regions where necessary and an initial very short summary) of the position shown in World Ocean Assessment I (also very short) and developments in 2010 – 2020, including in the main ecosystem services and benefits arising, social aspects and the distribution around the world of those ecosystem services and benefits and the social aspects in respect of:		
3.1 Water quality impacts on the food web (hazardous substances and nutrients)	4.1 Water quality in respect of hazardous substances and nutrients	5.1 Water quality in respect of hazardous substances and nutrients
3.2 Primary production	4.2 Changes in land/sea relations (sedimentation, erosion and reclamation, estuarine developments and stressors)	5.2 Surface-water biodiversity in the open ocean
3.3 Fish stocks (in both shelf waters and the open ocean)	4.3 Coastal and shelf biodiversity and habitats (including coral reefs, mangroves, seagrass beds, etc)	5.3 Deep-sea biodiversity in the open ocean
3.4 Shellfish stocks	4.4 Area-based management tools (including marine spatial planning, marine protected areas, particularly sensitive sea areas, etc)	5.4 Hydrothermal vents and cold seeps
3.5 Capture fisheries (in both shelf waters and the open ocean) and shellfish harvesting – including impact on target species and through bycatch	4.5 Aquaculture installations	5.5 Inter-continental shipping
3.6 Aquaculture production	4.6 Coastwise shipping and ferries	5.6 Seabed mining in the Area
3.7 Seaweeds for food	4.7 Ports	5.7 Submarine cables

3.8 Top predators (marine mammals, marine reptiles, sharks and other elasmobranchs, tuna and billfish and seabirds)	4.8 Offshore hydrocarbon industries	
3.9 The trade in fish products and other food from the sea	4.9 Offshore renewable energy industries	
	4.10 Seabed mining within national jurisdiction	
	4.11 Tourism and recreation	
	4.12 Impact of solid-waste disposal on water quality	
	4.13 Marine debris, including nanoparticles	
	4.15 Cultural links to the seas	