

Lessons learned: Note from the Group of Experts

Purpose of the document

This document provides a perspective on lessons learned during the second cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects. The document describes challenges and obstacles encountered during the process and formulates suggestions on how to address them. The aim is to identify where the process could be improved with the view of streamlining processes, improving planning and better supporting those involved in the process in producing a robust and respected assessment. Perspectives are provided by both the Group of Experts and also writing team members and peer reviewers from the Pool of Experts, who were consulted through an online survey. The critique and related remarks are aimed at being constructive rather than providing a negative view of the process.

Background resources of relevant documents and lessons learned from the first cycle can be found in Appendix 1. Full responses from the survey sent out to writing teams and peer reviewers can be found in Appendix 2.

Lessons learned – the perspective of the Group of Experts (GOE)

Group of Experts: personnel

Participation in the Regular Process by all members of the Group of Experts is voluntarily and therefore is on top of workloads associated with their current activities. Support by the Secretariat (DOALOS) has been highly helpful, however there remain challenges in fulfilling all tasks related to the regular process.

Composition of the GoE: The GoE in the second cycle continued to be dominated by natural scientists resulting in either low numbers of members or no members with capability in social science, economics and policy (particularly at regional scales). **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming.

Size of the GoE: The intent has been that the GoE is comprised of 5 members from each of the 5 regional groups. **As occurred in the first cycle**, some regions did not meet this quota and as a result, the eventual number of GoE members for the second cycle was 20, one of which did not take part in any of the activities of the second cycle, resulting in an effective membership of 19. Of those that were nominated to the GoE, many could not attend all of the meetings of the GoE due to other commitments, resulting in an average of 12-15 members attending face-to-face meetings at any one time. Disproportionate distribution of GoE members to certain regions also meant that when teleconferences were scheduled uneven participation occurred resulting in disjointed discussion of activities. Implementing arrangements so that additional members can be appointed (perhaps by the Bureau) if any region does not appoint its full complement might provide a solution to this ongoing challenge. This would ensure that tasks are spread more evenly across members and that meetings have adequate quorums for progressing activities.

Capability of the GoE: It should be recognised that in bringing people from the five regions together, that resources and capability are not uniformly distributed through regions. A number of the GoE could not participate in teleconferences of the GoE or if unable to attend face-to-face meetings could not connect with those meetings virtually to participate because of lack of access to resources (e.g. regular power/internet connections). Some did not have current software to

be able to access shared documents and some were not familiar with working through virtual/live processes. This impacted the ability to coordinate work effectively across the group, manage inputs to documents efficiently and ensure that members were contributing to the process and communicating the process in similar ways. All members need to be able to communicate on a regular basis through online meetings and via sharepoint so that all members are equally aware of processes and communications and are organising chapters in an agreed and standardised manner. This will ensure that the roles and responsibility of members are understood and agreed in an early phase of the process and reviewed periodically. It will also ensure that the responsibility and duties in the development of chapters are equitable across the group and that a small group of members with resources and capability are not overwhelmed with excess duties.

Commitment by the GoE to the Regular Process: It is essential that all members of the GoE can commit themselves to the work, including having the resources to effectively contribute to the process. One of the issues during the second cycle was arguably that the workload was unevenly divided between the members of the Group of Experts, resulting in some members being lead members of a large number of chapters, and others not leading any. This was further exacerbated by leads not engaging co-leads to provide support and/or co-leads being engaged and not providing support. It also meant that while some GoE members delivered inputs into the process on time, others failed to meet deadlines, resulting in several revisions to the timetable associated with the regular process. This made providing consistent information to writing teams and full engagement of some writing teams on chapters difficult (see also timetabling). **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming.

Succession planning: it is vital that there is some continuity of members of the GoE between cycles to ensure that process history can be passed on and lessons learned can be passed on and implemented. Extending this to the pool of experts will help in facilitating broader understanding of the processes associated with the development and delivery of the assessment amongst this group. **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as an important consideration.

Face-to-face meetings of the Group of Experts: Issues with members of the group of experts attaining visas to attend face-to-face meetings at the UN in New York was identified in the lessons learned from the first cycle and continued to be a problem throughout the second cycle, largely because formal invitation letters were issued only relatively close to the dates of meetings and arrangements for travel could not be assured early on. Managing adequate involvement by GoE members from countries that require visa applications, needs to be considered, particularly where applications for entry into the US might take considerable periods to be processed. Ensuring invitations are provided to GoE members well in advance of any customs processing periods and arranging multiple-entry visas where they may be applied for, may be appropriate solution to this problem.

Provision of support to the joint coordinators: the current expectation is that the two joint coordinators assigned to the regular process attend all meetings associated with the regular process – first, this places a lot of work (and associated travel) expectations on two people and second, attendance is not always possible (e.g. they might be ill, may have workplace priorities, may be on leave). Implementing formal support through the assignment of deputy coordinators is one way in which this workload could be distributed and managing the attendance of a representative of the GoE at meetings associated with the regular process could be improved.

This could follow the current practice of one deputy from the developed world and one from the developing world (although see note on preparation of meetings and visa applications)

Provision of support to the GoE: Compared to other UN processes, resources are quite limited for the Regular Process. Adequate human resources at the secretariat are required to ensure that appropriate support to the GoE and the writing teams is provided and also that the current resources within the secretariat are not overloaded. This includes technical support for a central platform that enables universal access to documents and facilitates virtual and concurrent development of documents and enough resources to accommodate for the attendance of all members to meetings. Resourcing for the second cycle was improved when compared to the first cycle, however it was still difficult to ensure all work could be done without stretching the resources beyond capacity. More support within DOALOS would also mean that help could be given in other tasks such as drafting agendas for workshops. Additional resources would support DOALOS taking a more active role in developing the pool of experts, developing agendas for workshops, managing writing teams and review processes and offering comments during the production of material by the Group of Experts **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming.

Planning and organisation of the process

Timetabling: deadlines were consistently pushed back both during the first and second cycle which created confusion amongst those involved in each cycle, resulted in inadequate planning of activities and often meant that nominated individuals could not contribute to activities because of unrealistic response times. Deadlines need to be set and stuck to. To allow deadlines to be met, some significant time has to be allowed in the timetable for adjustments as implementation proceeds. This in turn means producing a timetable for the whole cycle as early as possible. The second cycle suffered from spending quite a lot of time in producing the Technical Abstracts of World Ocean Assessment I before starting the planning of the main output of the cycle. Clear contingency measures need to be set up to react to delays in the process and how to react when people are not responding to requests or are unable to respond due to private or work-related issues.

Focus: Identifying the audience for the process and how the outputs of the process will be used are key elements to the success of the process and its continuing relevance. If the aim is that the regular process will produce something of the same standing as the IPCC/IPBES reports, then it is important to identify who will use the outputs (e.g. what policy decisions will they inform, are they useful educational tools, can they be used in management etc). This will inform the shaping of outputs, assist outputs in delivering targeted messages, and ensure that time is not wasted on products that have no use. Further, the Ad Hoc Working Group of the Whole could usefully reconsider its decision that the assessment should not encompass policy considerations and analyze policies even within the broader context of effectiveness, what has been successful and what has not, where gaps occur etc. This factor limited considerably the scope of discussion of certain issues or even chapters, in particular those dealing with management.

Workshop focus: Workshops are a useful way of involving a wider group of people in the Regular Process. Post-COVID19, virtual meetings will no doubt play a larger part in the work of the Regular Process, but some face-to-face meetings will still be useful. Experience in the second cycle showed that the first round of regional workshops could play a useful part in formulating the overall shape of the output, but that, the second round of workshops were largely unsuccessful in supporting the development of writing teams and associated chapters. In

many cases the writing teams that had been identified for each of the chapters were unable to attend these workshops and therefore were unable to take part in the discussions. This resulted in a disjunct between workshop discussions and resulting suggestions for chapter content and focus and subsequent chapter development by the writing team. With limited resources, it may be sensible to organize virtual regional webinars to disseminate information on the regular process and discuss the overall structure of future assessments, and reserve the resources for face-to-face meetings for subject-specific (e.g. development of specific chapters) meetings. **This need to bring writing teams together in focused meetings was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as an important consideration.

Workshop planning: One of the key issues that potential attendees to regional workshops held as part of the regular process have raised and identified as a reason for not being able to participate was the late organisation of workshops. The GoE should start drafting an outline for the assessment (and its focus) very early in the cycle so that workshop content can be developed and disseminated with adequate lead time to regional workshops. Calls to members states for hosting workshops should be undertaken early and commitment by member states to hosting workshops established so that "be aware/save the date" messages can go out to potential workshop participants/the pool of experts/writing teams. Many institutions and agencies employing members of the pool of experts implement approval processes for international travel to ensure adequate health and safety considerations are met. These often are required to be put in motion weeks and in many cases months ahead of any travel.

Linkages with other global assessments: currently linkages with other global assessments conducted under UN and other intergovernmental processes are lacking, which may result in poor consideration of the content of the assessment by other assessments, duplication of efforts, unclear demarcation of content between assessments and inadequate maximisation of opportunities between assessments. **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming. Enhanced coordination and communication between the secretariats of relevant processes is needed to address this issue. Connecting the chairs/coordinators of the various assessments under the UN and other intergovernmental processes and supporting regular (virtual) meetings of the chairs/coordinators would assist in aligning efforts and help to avoid duplication of efforts and content.

Clarity and standardisation of processes: communication between the Group of Experts and those in the Pool of Experts contributing to writing teams was ad hoc during both the first and second cycles with the level of engagement variable across the Group of Experts (see also commitment to the GoE). **This was identified in the lessons learned from the first cycle as a shortcoming** and continues to be a shortcoming. Because of this, some writing teams have highlighted that the process for the development of writing teams, expectations of the writing teams and processes for preparation of chapters, review (both peer and member state review) and revision were not clearly set out. Although documents providing guidance to contributors, guidance for peer review and templates for chapters were produced, these were not passed onto writing teams consistently. Associated, limitations with the publication of the assessment (i.e. word limits) in many cases were not identified until after drafts of chapters had been developed and not communicated consistently to convenors and writing teams. Standardisation of communications, clarification of processes and clear (standardised) instructions that set out steps in the process of developing and delivering the assessment as well as any limitations with

the publication of the assessment should be developed at the start of the cycle to assist with addressing this issue. This could be facilitated through the development of a centralised, readily accessible and clearly set out hub for writing teams and reviewers where they can access information that can guide the development of the chapters and facilitate centralised coordination of chapters. This would allow all members of a writing team to work on a single text that is also available to the secretariat and the Group of Experts providing for easy oversight of chapters and timely provision of feedback and guidance to writing teams. Improving the capability of the GoE, support processes for ensuring that individual members of the GoE contribute to the process in a similar manner and provide standardised information to writing teams will also assist in addressing this challenge.

Greater use of virtual technologies: The COVID-19 pandemic has accelerated progress on organizing work remotely. The ability to meet and work remotely should be further explored to facilitate the work in the 3rd cycle for all structures (secretariat, bureau, GoE, PoE and peer reviewers) and across multiple forms of meetings. For example, rather than holding regional workshops to specifically distribute information on the output of previous cycles, webinars could be held and scheduled to accommodate multiple time zones (and therefore multiple regions). This would provide greater access by the community (see also issues raised in other sections of this document related to workshop planning and travel), allow for standardisation of content across webinars and provide opportunities for provision of feedback that might not necessarily be supported through a workshop (i.e. cultural considerations for input). Formal virtual organisation of meetings of writing teams would assist in progressing the writing of chapters, particularly during the development phase of chapters and provide better oversight for the GoE on the development of chapters. Greater support for virtual contributions to meetings of the GoE would assist in overcoming some of the limitations associated with issuing of visas and planning processes that are not anticipatory enough to accommodate formal travel approval systems. Overall greater use of virtual technologies would save time and money which could be put into other parts of the process that require support.

The Pool of Experts

Expertise of the Pool of Experts: is currently a passive process which results in uneven coverage of disciplines with, in particular, a lack of expertise in social and economic aspects of the ocean and understanding of policy, regulation and management processes. Further, many experts nominating to the pool of experts identified themselves in their personal history forms as having expertise in particular areas, but then when invited to provide that expertise to writing teams, identified that they did not have adequate expertise to contribute to chapters. Greater participation by member states in identifying expertise across disciplines (including socialising the regular process and engaging potential participants) would assist in filling some of these gaps and overcoming some of the shortcomings in the current self-nomination process. It might be worthwhile for the Ad Hoc Working Group of the Whole to reconsider the decision in 2010 that there should be no mechanism by which interested experts could apply to be nominated (see also nomination to the pool of experts).

Nomination to the Pool of Experts: in many cases, the nomination process to the pool of experts was not well understood by those wanting to participate in the regular process and information on this process was not widely disseminated. . Many countries do not appoint focal points, and some permanent missions have been observed to lack sufficient expertise on the process. As a result, information on the nomination process was lacking in many countries, and nominations continued to be delayed with flow-on effects for the development of writing teams and

progression of chapters. **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming. While provision on information on the Regular Process website is of some help, dissemination of information in this manner continues to be a passive process. Improved provision of information associated with the nomination process to member states and great engagement by member states in the nomination process is required to improve nomination processes.

Accessing information on the Pool of Experts: Personal history forms (PHFs) and CVs submitted as part of the process for nominating to the Pool of Experts were submitted during the second cycle to the Division as pdfs. To then translate the information in these documents into something that the GoE could use, the Division then had to manually enter this information into a spreadsheet and then make that spreadsheet available to the GoE. This is an extremely inefficient way of making the information available with an obvious lag time in updating information. This reliance on manual entry of information was identified as a shortcoming in the **lessons learned from the first cycle** (when PHFs were submitted as paper documents) and continues to be highlighted from the second cycle as a shortcoming. The attempt in the second cycle to ask experts to enter their own details on a database on the Regular Process homepage did not work: a substantial proportion of experts did not enter their details or, if they did, only included very basic details. This made identifying experts in particular fields and identifying where there were gaps in expertise (so that timely and adequate responses to these could be formulated) even more difficult. An effective electronic system for nominations needs to be established (e.g. an online database), that can be updated in real time and easily queried by the GoE.

Development of writing teams and assessment chapters

Involvement of members of the Pool of Experts: When contacted in regard to involvement in writing teams, a number of the members of the Pool of Experts did not reply. It was not clear whether this was lack of interest or the diversion of the message to a junk mail folder. Likewise, several members of the Pool of Experts, having agreed to be a member of a writing team, then made no further contribution to the development of chapters. **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming. If additional support staff can be provided to the Regular Process, it would be helpful if they could follow up with members of the Pool of Experts in terms of their level of engagement. This would also be supported through improved communication between chapter leads and writing teams and establishing a centralised hub for the development of chapters – this would allow chapter leads to easily establish those members of writing teams that are contributing to chapters and those that are not. Further, greater participation by member states in identifying experts and directly engaging them is likely to support the involvement of members of the Pool of Experts in the process.

Requirements for establishing writing teams: During the second cycle, a requirement imposed on the GoE was that all writing teams should include one convener and three members of the writing team. This requirement was imposed after a number of writing teams had been established and resulted in additional members being brought into chapter writing after the process had been started and roles had already been assigned. It also imposed, in some cases where expertise was not readily available for addition to writing teams, additional tasks placed on lead members in identifying expertise and having individuals nominated to the pool of experts and on conveners in bringing new members up to speed on progress and assignment of tasks. These delayed processes associated with the development of chapters. The decision on

one convenor and three writing team members was somewhat arbitrary and did not recognise that where chapters were highly specialised and experts engaged were global leaders, sufficient expertise could be met with lower numbers. If such requirements are to be imposed on future cycles decisions in this regard should be made at the start of the cycle to ensure adequate planning of writing teams.

Approval of writing team members: The process of approving writing teams members during the second cycle was such that the lead on a chapter would identify a member of the Pool of Experts with sufficient expertise, notify the Secretariat and the Secretariat would then pass on the details of the potential writing team member to the Bureau for approval. This is a somewhat cumbersome process and is one where approval is being made by people that have no expertise in the subject matter of the chapter the potential writing team member might be proposed against and no expertise in the field to know whether or not the potential writing team member is appropriate for the role on a writing team. The process also undermines the expertise and role of the GoE and chapter leads in identifying appropriate members of the Pool of Experts for inclusion in writing teams. The Bureau has assigned experts in their field to the Group of Experts to provide oversight of the assessment process and should have confidence that as experts in their fields they can form writing teams of appropriate expertise. Streamlining the process of approval to writing teams where the Secretariat can approve based on the recommendation of the lead on the chapter would ensure that writing teams can get underway quickly.

Outreach

Communication: Provision of information to external audiences is not great! The website needs an overhaul so that it is user friendly and anyone landing onto it **knows** exactly what the regular process is and what it is aiming to achieve in less than a minute. Information from the assessments needs to be distilled and targeted to the audiences it is intended for in easy to read and interpret formats. **This was identified in the lessons learned from the first cycle** and continues to be highlighted from the second cycle as a shortcoming. Technical abstracts written in UN styles (numbered paragraphs and legalese speak) are not what people want to read (see also Focus). A better dissemination of the WOA outcome outside the UN bodies will be desirable. This is particularly important if the regular process is to achieve widespread acceptance as a credible assessment process with communities both within and outside of the UN.

Lessons learned – the perspective of the Pool of Experts, including writing teams and peer reviewers

The feedback compiled here was provided through an online survey sent out to all writing team members and peer reviewers approved by the Bureau. Responses came from 108 writing team members, 16 reviewers, 4 people that identified as both and 1 person that did not identify their role in the assessment. Each of the questions contained in the survey and responses provided grouped into main themes is provided in Appendix 2. The responses show the breadth of experiences. Overall the majority of respondents were satisfied with the process, identifying it as particularly beneficial for their networking, career development and growth in expertise. In particular, respondents were appreciative of the opportunity to provide feedback on the process and to identify areas in which the process could be improved.

Overall, the main themes in terms of lesson learned provided by the pool of experts are:

1. Improved and standardised guidance is needed for writing team members and reviewers (clear and reliable guidance documents, consistent communication from the GoE, Secretariat and chapter leads). This needs to be provided early in the process and should be provided in a consistent manner. It should clearly set out what is expected of convenors, writing teams members and peer reviewers, outline the format and style of chapters, the intended audience and any associated limitations on chapters (e.g. word counts, content focus/scope, formatting requirements). In many cases writing team members identified that they were not provided with the template for chapters and not informed of word limits until late in the development of chapters, resulting in additional work. A suggestion was that a document template including a citation template be developed for provision to writing teams;
2. Greater involvement in setting the structure of the assessment either through a review process or more targeted provision of feedback either through the workshops or another platform was highlighted. The need to avoid trying to duplicate information being provided by more comprehensive UN processes such as the IPCC and for the assessment to be more data driven were identified as important considerations that could be included in such a process;
3. Improved and more frequent communication is needed between chapter leads and convenors and between chapter leads, convenors and writing team members. Facilitating face to face meetings for initial coordination and planning and regular virtual meetings to discuss progress and drafts were identified as ways in which communication could be improved and collaborations on chapters could be better supported. This would also support the provision of more consistent information to writing teams and for writing teams to be informed of progress on the process and changes to the process including timetables;
4. Improved planning of the process including provision of adequate timelines so that delays in the process can be accommodated and adequate periods for peer review can be provided. Consistent messaging of timelines and deadlines (see also point 2) was an area identified for improvement;
5. Improved planning of workshops is needed including notification and timing of workshops (many identified that notification of workshops came too late), provision of resources, communication of the intent of workshops and provision of more focused workshop content. A lack of an ability by writing team members to attend workshops where relevant

- chapters were being discussed (either through a lack of funds or inability to attend because of timing and notification) was identified as a consistent limitation to progressing chapters;
6. Inconsistencies in the coverage of expertise within writing teams (including regional representation) and contributions by all writing team members to chapter drafting were highlighted as shortcomings in the functioning of writing teams, particularly in ensuring that the chapter topic was covered comprehensively with many feelings that there were gaps resulting from a lack of expertise.

Appendix 1: Background resources

Lessons learned from the first cycle

- [Letter from the Joint Coordinators of the first cycle on lessons learned](#) (see annex II)
- [Abstract of views on lessons learned from the first cycle](#)

Request from the General Assembly

- [The most recent General Assembly resolution on oceans and the law of the sea](#) (A/RES/74/19: For Regular Process, see paragraph 306 onwards)
 - “307. Reaffirms the principles guiding the Regular Process and its objective and scope [...]”. These principles are outlined in: [A/64/347: Report of the AHWG](#), Annex.
 - 318. Decides to launch the third cycle of the Regular Process, to cover five years, from 2021 to 2025, and requests the Bureau, with the assistance of the Group of Experts and the secretariat, to develop a draft programme of work for the third cycle, on the basis of the possible outcomes and building blocks of the third cycle prepared by the Bureau and endorsed by the Ad Hoc Working Group of the Whole at its twelfth meeting **and taking into account lessons learned from the second cycle**, and to report to Member States in advance of the thirteenth meeting of the Ad Hoc Working Group;
 - 319. Requests the Bureau of the Ad Hoc Working Group of the Whole **to consider the lessons learned from the second cycle of the Regular Process**, including with regard to the duration of the cycle and its outputs, in line with the modalities set forth in paragraph 282 of resolution 70/235 and on the basis of input received from Member States and other participants in the Ad Hoc Working Group and the Group of Experts, as well as from the secretariat, and also requests the Bureau to inform the Ad Hoc Working Group of the views received and to circulate that information in advance of the thirteenth meeting of the Ad Hoc Working Group;
 - 320. Requests the Secretary-General to prepare the resource requirements for the third cycle of the Regular Process on the basis of the draft programme of work for the third cycle, to be developed in the intersessional period by the Bureau, and to report to Member States in advance of the thirteenth meeting of the Ad Hoc Working Group of the Whole;

Other resources

- [A/72/89: Report of the AHWG](#) contains the Terms of reference and working methods for the Group of Experts
- [A/72/494: Report of AHWG](#) contains the Guidelines for the first round of workshops of the second cycle and the Guidance for contributors, Part 1.
- [A/73/74: Report of the AHWG](#) contains the Guidance for contributors, Part 2.
- [A/73/373: Report of the AHWG](#) contains the report of the GOE on the preliminary timetable and implementation plan

Appendix 2: Survey responses

Nomination process

1. How did you find out about participating in the assessment?

Invited by a country Mission to the UN/National focal point: 6 responses

Invited as a member of the Pool of Experts from WOA 1: 17 responses

Invited by government/national agency/organisation: 24 responses

Invited by a member of the Group of Experts/joint coordinators: 12 responses

Invited by a colleague: 26 responses

Invited but not specified: 14 responses

Can't remember: 3 responses

Other responses: 1 response

2. What motivated you to apply for nomination to the pool of experts?

To contribute expertise/knowledge: 12 respondents

Involvement in intergovernmental/multidisciplinary discussions: 4 responses

Interest in WOA1: 7 responses

Interest in specific topics: 19 responses

Regional representation: 5 responses

Interest in learning from/working/collaborating with others: 11 responses

Involvement in a global project: 12 responses

Career development: 3 responses

General desire to contribute: 24 responses

3. *How easy did you find the nomination process?*

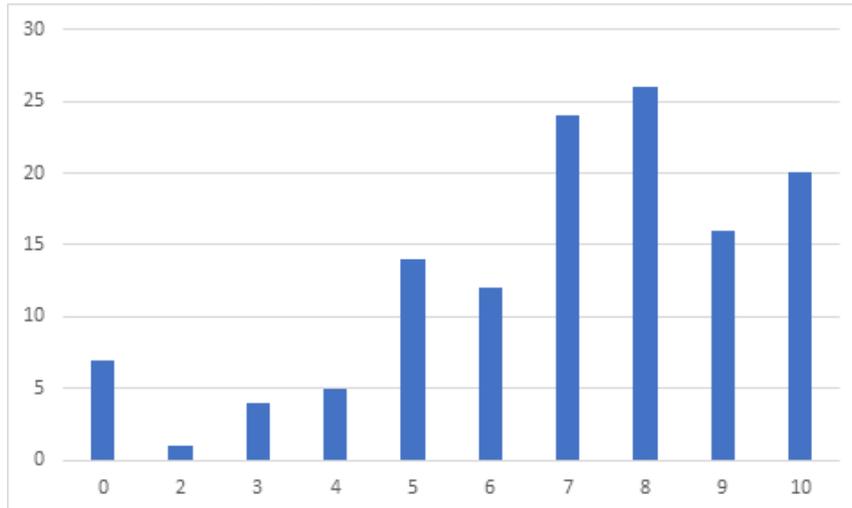


Figure 1: Simplicity of the nomination process from 0=very difficult to 10=very easy. (Y-axis reflects the number of responses in each category).

Overall guidance

1. *How useful did you find the guidance to contributors?*

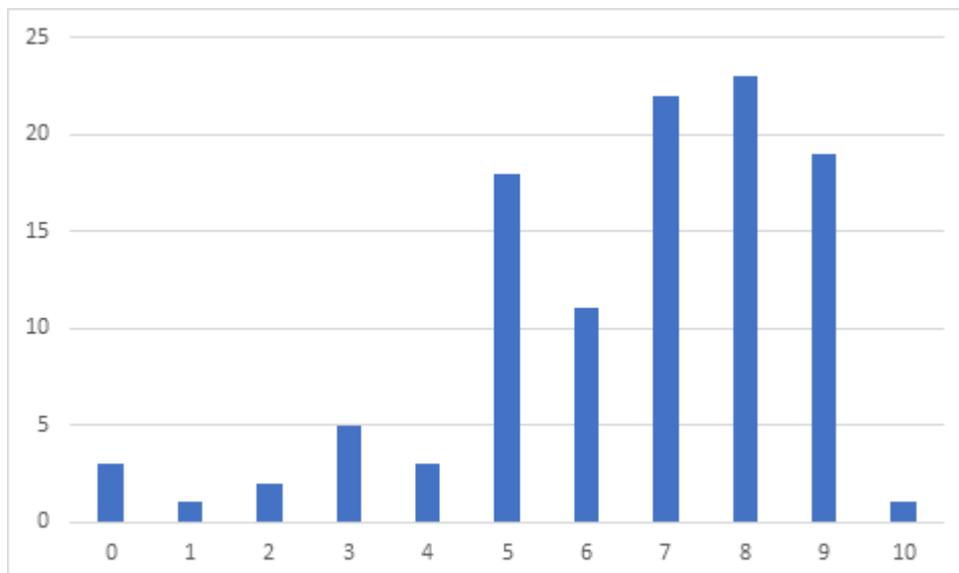


Figure 2: Guidance to contributors from 0=very bad to 10= very good. (Y-axis reflects the number of responses in each category).

Comments on guidance to contributors

Awareness of official guidance

- I received no guidance
- There wasn't any guidance - we just followed the lead of the leaders of each time. We could have used more guidance on the scope of each subject/chapter and who was going to review what and when. There was no timeline.
- We got through it without much guidance.
- The lead provided the structure and the drafts for us to make inputs

Official guidance content

- Texts should be short, illustrative and guide. More effort is required to achieve a short illustrative guideline.
- Some confusion on how to interpret categories
- Some pieces of information were confusing, e.g. quotation methods.
- They were useful but I felt that because there were so many different opinions in the writing teams really the conveners and reviews were more useful than the guidance documents.
- The guidance was very useful, although it did help discussing this in person at a meeting, as some aspects of what was required were not clear. The linkage to other chapters and sub-sections was always the most difficult aspect, as guidance on this was limited.

Structure of assessment and chapter template

- Very clear guidance on the precise required content and focus would be best, together with very explicit timelines
- Even the template was obscure; little guidance on what time period we were covering
- The strategies on the way to approach the gaps of knowledge were not so efficient.
- The guidance to contributors was initially useful though the template used did not fit all chapters equally well due to the composition of some of the smaller writing teams involved and the complexity of the topic.
- I only ever had the draft template which in several instances was inappropriate to our chapter. I clarified with the convenor but then heard nothing for many months.
- a selection of topics was adequate and the time to write was sufficient. The final object could have been more accurately determined
- I have some prior experience with writing documents for government officials, for policy briefs of scientific advice. But many colleagues do not. I think the guidance needs to have more explicit instructions about the audience for WOA. Many of the writers are used to writing primary research articles. It is a very different writing style and this should be confronted with some direct guidance about how to write in a style that will be clear to the non-scientist readership.
- They were clear, however they should be further improved to avoid ambiguities that may yield the need for re-write-ups when reviewed

Workshops

- What was understood and clearly communicated as the goal and content of the chapter at the workshop was apparently incorrect when it came time for review.
- Workshops were not sufficient (in number) to provide full guidance for all chapter

Chapter length/word allowance

- Mostly the issue was chapter length. First there was minimal guidance then after substantial writing manuscript length requirements were so short that they would have required wholesale deletion of important information. If the goal is to update WOA1 and provide details for use by delegations, variable length chapters will be required to address variability in the necessary details.
- As said before, the word allowance was not made clear and, in the end, made a mockery of the process since almost nothing could be contributed.
- I felt everything was clearly explained, except the desired length of the final document
- The scope can be better given to the writing team (given the strong length limit)

Formatting

- would have been helpful to have a word template as well as an endnote file to make sure that the references were exported in the exact right format.
- overall good, just a few minor details: if writing team are meant to handle part of the typesetting work, it would be valuable to have template documents created to ensure the long editing style specs are easy to follow, that would increase efficiency for both the writing teams and the editorial teams. the same issue emerged with citation style, there was conflicting information, it would be much easier, and take less time overall, to develop a citation template (eg a Mendeley citation style).

Writing teams

- As I stated before, forming the teams and assigning members was unorganized. There were also several authors who never responded (some on both of my teams) and the conveners could have taken action sooner to find new authors or at least remove the non-participating ones.
- Some contributors were excellent. Some were too focused on a very narrow perspective. There were gaps that I had to fill for several regions however.
- In general roles were not clearly stated, and internal timelines were not defined adequately. There was not a round of presentations or access to the colleague's CVs so it was hard to recognize expertise. In one of the chapters I knew I was part of the writing team belatedly and did not follow the whole process.
- Seemed straightforward but the lead author was a very knowledgeable individual with respect to the WOA process so that may have made things easier for us
- Contributors should be active and prompt to the request of lead on the delay
- The guidance provided by the leads was the most useful in understanding the expectations and the work involved.
- I participated in two writing teams (6D and 6E) and both lead writers were very clear in their requests and extremely competent in integrating the products of the different writers.
- The guidance was taken on board by our chapter leader who did much of the work. We helped as far as our specific expertise allowed
- it was clear enough to help in developing one's part of work. However, the writing team may need to assign specific roles to each member beyond their provision of information on their region such as proof reading, editing and formatting which is done by the lead alone.

Review process

- In the review process we experienced some mismatch with comments performed on an earlier version of the chapter after submission of the final one.

Overall guidance

- There was some initial guidance, but I did not think that it was fully followed through. I received different guidance from different sources, including contradictions between the outline and the template.
- I think the guidance was adequate contributing to improve the outcomes of the team.
- What can I say? The guidance was fine, in time, and appropriately responsive to comments or questions.
- The goalposts changed and the level of information required was much less compared to what I/we felt was required. I have found the WOA II process incredibly frustrating and demoralising.
- I was part of WOA I, so my experience facilitates me this work, but guidance was good in this opportunity too.
- It was good taking into account the role of UN people - about the leaders - not a good experience. I think that the next Regular Process should be interesting a little Guide to all steps.
- It was quite vague to start with, but got better as drafting progressed.
- As a new contributor it was all confusing - there were a number of very well-informed people which made it difficult to ask the 'daft laddie' questions, especially in some of the plenary sessions.
- I think that more details might be more useful in the future
- I think the information could have been a bit more clearly provided, I felt that needed to chase down information rather than it being provided up front.
- It took time understand what was expected.
- excellent
- Very collaborative
- The management was easy since the information was given on time and according to a predefined downloadable agenda.
- The thoughtful consideration of the guidance is worth remembering and thanking.
- Very collaborative
- Once again, very much dependent on the persons behind. OK for one chapter, not sure how things were actually done within another chapter
- We received guidance before, during the workshop and after, during the process of writing and reviewing the chapter.

General comments

- As above I think I was asked to participate a little late in the process so maybe missed some of the routine mail outs etc
- Marco Boccia, Programme Management Officer, Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, UN, did a really good job of ensuring a deadline and answered all questions carefully and adequately. The fault was in the organisation in Odessa.
- WOA I did not add assistance to the marine plants and macroalgae chapters
- It was a great coordination. I know it was not easy as the writing team was formed for scientists from many countries. The online meetings were hard to follow for me in Australia
- Guidance to contributors requires that they really understand their intentions. This requires several cycles of writing and revision. Therefore, it is an arduous and complex writing process of understanding, communication, coordination and adjustment.

- Although there is no special chapter in the first report, there are still corresponding report contents, which is ignored. If it is clear in the guidance, adjustments can be made at the planning stage.
- All kinds of emissions are the most important cause of global ocean change. We should improve the compilation of emission inventory and strengthen guidance.
- They are very essential and should be clear enough and easy to follow by all concerned in the assessment process. Ambiguities tend also to complicate the review outcomes leading to re-write-ups.

Workshops

1. *Did you attend one or more of the regional workshops?*

Yes: 56, No: 70, No response: 3

2. *If yes, was the information provided at the regional workshops useful?*

Yes: 50, No: 20

Note: 12 no responses were from those that had indicated that they had not attended a workshop; 1 no response was from someone who had not indicated whether or not they attended a workshop; and 1 yes response was from someone who had not indicated whether or not they attended a workshop. Only those responses from those that identified they attended a workshop are included here.

- I suggest future workshops spend less time on presentations and more time on the structure and timeline.
- No one lead the Odessa meeting adequately so we left not knowing deadlines, or where the draft manuscript would be in time.
- very poorly coordinated and little actual process of the chapter given
- No, because the participation was remote by skype with bad sound quality and with no sharing of presentations.
- This chapter was not discussed in the workshops that I have participated
- too much politics and no science.
- my opinion is that the workshop was some confusing, perhaps for the fact that was made together with other congress (COLACMAR),
- Well, the first was a bit chaotic (Malta) as the information prior was late and quite limited. Better for the Odessa WS as we at least did get information before hand on which chapters to discuss

3. *Was the format of the regional workshop useful for progressing discussions on chapters?*

Yes: 47, No: 31

Note: 17 no responses were from those that had indicated that they had not attended a workshop; 1 no response was from someone who had not indicated whether or not they attended a workshop. Only those responses from those that identified they attended a workshop are included here.

- The best experiences were the ones where the regional workshops allowed the writing team to discuss in person. One more day in the workshop would had been great for the final output
- Not always, I think small meetings by country or region before going pay be usefull
- more pre-meeting material and more focused work at the workshops would imrove efficiency and outcomes.

- Very few of the writing team attended the single regional workshop.
- No, my chapter was not in the agenda of the regional workshop that I participate. I think will be more useful if the meetings were organized by chapters
- We were not told the importance of adhering to the sub-headings in the chapter as per WOA1
- I didn't know I would be co convener of the macroalga chapter and help with the marine plants chapter.
- The participation was remote by skype with a not so sound good quality and with no sharing of presentations.
- Yes, to some extend.
- Yes and no. Much was uncertain in the beginning
- A bit more coordination prior to the workshops would have helped. Attendees for different chapter groups very limited.
- No focus on subjects of the report so, no progress at all.
- very general, and crowded wit colleagues from very different areas, both regional and thematically.

4. *If no, please comment*

- I could not go due mainly financial shortcomings.
- I had no funding to attend regional workshops. It would have helped a lot to be able to attend.
- No meeting was organized and this was a big problem for the overall coordination
- I got only one invitation to the workshop, but I suppose there were more.
- I am based on Australia and it was hard to meet the time of the workshops
- It was never practical to go to regional workshops without funding
- I did not attend any of the regional workshops, I did not have funds to travel and join.
- I never even heard there were workshops
- we did not have any physical meeting and there is something that was not coreect in that to coordinate
- I unfortunately did not attend because the time frame that the workshop was communicated to me by my country coordinator was too short for me to be able to plan to attend from my institution.
- the results of the regional workshop were not sent around- although none held todote re Australasia
- I have no idea-I did not receive any feedback
- I understand that doing meetings in more alternative places could be an interesting initiative for the involvement of developing nations. However, the remoteness of some of the venues seemed too time-consuming for just a two-day meeting.
- not attended and no info
- I think our chapter would have worked better if we had gone to a workshop, but the intent of the workshops and the agenda were not well communicated. it would have been better to state explicitly which chapters or topics were to be covered at each one.
- I didn't attend - these were announced typically at very short notice, with no consideration of the ability of key participants to attend or of our other commitments (e.g. teaching - no consideration of semester dates), and very limited funds.

Writing teams

1. *Did you find the writing team of an adequate size?*

Yes: 84, No: 18, No response: 23

All comments associated with a no reply

Size

- too large; writing works better with a smaller team
- though initially we had enough people, there was a loss over time and less responsiveness
- At first it was not large enough, but I recruited a few members and it was better. I think a few extra people would have been helpful, because there were varying levels of participation.
- Size of team was not discussed until late in process. I contributed to three chapters. One I wrote entirely myself when asked, but late in process was informed there needed to be a minimum of 4 co-authors
- Unfortunately, very few experts contributed to the writing of the chapters that I participated in
- Larger group might have helped

Contribution

- Well, yes and no. The list of authors is longer than the list that actually contributed. And that's frustrating as someone that worked hard and has to share the credit with some authors/countries who never responded. I think 3 REAL authors is ideal.
- Many initial nominations did not follow through to draft the chapter.
- Although there were enough members, very few contributed positively.
- In the end it was able to complete the task but it was a very uneven process with 2 or 3 members of the writing team doing the bulk of the work and others never responding.
- Two writing team members could not contribute at all

Expertise

- Due to the vastness of the chapter theme, it would have been good to have more experts involved
- more experts could participate to cover major regions of the world ocean
- more colleagues could be useful, specially in order to cover certain specific aspects that are very different in many geographical areas.
- I was aware that a small number of areas (within chapters) were not fully covered due to lack of interested experts, while other had maybe too many

Other comments

- We were given very little notice of the process and very little time to contribute to the document
- The process was miserable. There was no apparent logic to the composition or size of the writing team, and no effort to determine who had capabilities in what topic areas.
- I was chosen as a member of the team for macroalgae but actually wrote the first draft

2. *Did you find the writing team had an appropriate composition for handling the subject matter appropriately?*

Yes: 76, No: 31, No response: 22

All comments associated with a no reply

Expertise

- Due to the vastness of the chapter theme, it would have been good to have more experts involved
- It would have been useful to have more water column expertise
- we need to have more people from oil and gas et offshore equipment.
- there were only 4 of us and I'm still unsure what expertise area 2 of those had in our particular chapter subject
- Again, to begin with not, but then I recruited additional members and that seemed to be nearly sufficient, though a few other turtle experts from different regions would have been helpful
- The majority of experts were from a very specific fisheries background, fortunately a few of the experts could provide a broader view of the chapter topic.
- The composition of the team was very adequate regarding international gender representation. However, the level of expertise of the members seemed to be strongly heterogeneous.
- There were gaps in expertise.
- The subject matter was very broad and highly interlinked with several chapters of the assessment and required professionals with wide experience in wide multidisciplinary subject areas.

Regional representation

- There was lack member from some regions
- More geographic diversity would have been good.
- Lacks researchers from remotely areas that have minor or lack of scientific information.
- A complex challenge, but one which was not delivered. There were sufficient people, but not diverse enough. Dominated by North Atlantic.
- there was a lack of geographical areas in some parts of the chapter
- Some relevant expertise, but not the team I would have picked from scratch from the world's marine biodiversity community.
- Several countries were not represented, and it was impossible to make contact because of missing replies

Contribution

- Although there were enough members to cover the global coast, very few contributed positively.
- Several of the members of the writing team doesn't seem really interested to participate in.
- Unfortunately, very few experts contributed to the writing of the chapters that I participated in

Planning/Functionality

- time and process constraints limited our ability to organize effectively. In the end three people contributed to my section. Although each was extraordinary, more time and knowledge of the process would have allowed for better planning of contributions
- Multiple people self-selected to write about the same things, and some topics were not covered. I was assigned one of those topics and felt unqualified to write on it, but no one else would fill in.
- Further to the above the poor process... some high-ups in the process ruined this set of chapters by deleting or combining some - which makes no sense, leaving the whole thing chaotic and insulting to those trying to assist.
- I felt we didn't fully cover the topic/opportunity assigned, but as a late-comer to the process (and I had my own challenges in being ver late in contributing) there was little I felt I could do to ameliorate
- There were important gaps.
- see previous response, in general yes, but there were some aspects that not adequately form my point of view

Other comments

- For some chapters yes, and for other chapters not so much.
- we could have done with a little more diversity probably
- One of three chapter, yes. Two of three chapters NO - as there were few other contributors
- People were added on as we went along
- Pending on the chapter, but the composition felt a bit haphazard pending on who had volunteered
- the solid waste part yes. The dumping part would have benefited of having more members for handling the subject

3. *Were you provided with adequate information on your role and the timelines associated with the assessment?*

Yes: 79, No: 27, No response: 23

All comments associated with a no reply

Information flow

- Was difficult to follow this.
- Not really—but we managed to do the work anyway.
- At some points I felt confused with the information flow.
- Not really – it has obviously dragged on and communication has been poor
- The initial stages were difficult, to work out what was expected.
- The writing teams were still being populated and continued to evolve during the process and timelines shifted along with this though communication on this was sporadic.
- Information on content/time lines/even potential contributors were very poor or non-existent
- I was involved in three chapters (one as a reviewer) and provided information was too dense form the part of DOALOS and fragmented from the leaders.
- It was clear that a number of people had an idea of the process, but coming in new was a real challenge in terms of understanding the processes and procedures.

- We had to adapt roles due to lead changes along the way. Miscommunication on the purpose of the chapter occurred and resulted in some wasted effort. Timelines were not well communicated.
- It was never clear what was going to happen until we got an email about it. The actual gatherings at various locations for the groups were not clear at all.
- I only received a request to contribute to the chapter too close to the deadline. I think it happen to the entire team.
- Regarding the workshop the communication was not satisfactorily, especially in the beginning the communication was poor on which subject to discuss
- yes and no. I was carefully followed up, but needed more direction on how to write, how to connect to global appropriate institutions

Timelines

- The initial process was rather confusing, but after that it was okay, with precise deadlines
- My role was fine but timelines/deadlines changed, making planning for this work difficult to address given other obligations.
- I'm not sure I ever saw a calendar and only in the last few days were given the remainder of the WOA 2 timetable
- Yes, once I actually got an assignment. But leading up to the writing assignments it was confusing and unorganized. Which led to really short deadlines.
- The timelines where not well communicated. There was significant confusion as to when the first draft is due.
- immediate deadlines were clear but the overall long-term process could have been clearer.
- Timelines seemed to change

Other comments

- See above. A terrible process. People tried to contribute anyway, but there was too little time, and much of their contributions were then deleted.
- I think I was invited in a little late into the process so likely I missed introductory material etc
- The Odessa meeting was not useful. Few timelines were given and a sensible process not provided
- It was rather chaotic since I joined the process late

4. *Was there adequate information provided by the lead (and co-leads where appropriate) to the writing team?*

Yes: 83, No: 23, No response: 23

All comments associated with a no reply

Information flow

- The length of the contributions was not made clear, so that a great deal of time was wasted looking up relevant recent information only to eventually have virtually everything discarded because of limited space or 'balance' with other sections
- Deadlines not given, progress of draft not specified
- I was lead for several and had no information to provide. There was little communication from above for much of time
- There was often a lack of top down information flowing to the writing team and slow feedback, however this evolved over time and was much better in the last months.

- There was information, but not very clear at times
- Somewhere along the way I was left off review emails despite making contributions to the text.
- Unfortunately, very few information was provided by them

Planning/Functionality

- In our chapter it was very difficult to have access with the leader - sometimes a selfish researcher (not a good experience).
- Just in the initial stages, we were a disparate team that never met; it took time to get the measure of the tasks.
- I was contacted in very different moments from each of the chairs of the chapters I contributed (with a gap of months!). One leader seemed confused about the process and the other two were not able to deal well with the inputs and message exchanges.
- There was confusion about who was doing what and indeed the structure of the final chapter and how the various contributions would fit together.
- The process often stops at the head of the chapter. Perhaps, making the chapter construction process more organic, will allow authors greater independence in production.

Process

- What was wanted was not really what was provided in the information sheet. The goalposts changed
- I was the lead and communicated directly with my co-authors. I was not informed of other potential contributors until the draft was complete

Other comments

- Mostly yes, but not at all times.
- Depended on the writing team.
- The chapter lead tried, but was over-ruled by some high-ups who insisted on deleting material that had been contributed, and were quite insulting - though that really displayed their own ignorance.
- as above - but neither yes or no on this one
- I finished up being one of the conveners.
- Pretty OK for chapter 11, very chaotic or absent for chapter 10

5. *Did you consider leads to be responsive to queries from the writing team?*

Yes: 93, No: 12, No response: 24

All comments associated with a no reply

- The lead on the chapter itself was fine but the higher-ups were terrible - dictatorial rather than responsive.
- Yes, occasionally delayed, due to his other duties
- I was sole author on one chapter for which it was very difficult to find co-authors, who then contributed little
- I was the lead myself and can not answer this
- At the start this was definitely a no as it took some time to get a response and then it was often confusing, near the end of the process however responses were very quick and informative.

- Some of my queries took weeks or were not answered at all.
- I did not follow enough the development of this chapter
- Not always
- OK for one chapter, not sure how things were actually done within another chapter

6. *Was there adequate communication provided by conveners to the writing team?*

Yes: 77, No: 29, No response: 23

All comments associated with a no reply

Information flow

- There was adequate communication, however very sparse, it would be better a more clear and frequent communication
- I think the flow of information and communication could have been better. For instance, I made some contributions which were not acknowledged
- more frequent updates from convenors would have been helpful.
- At first little communication carried out. Then, I suggested two new members of the team and we worked very well together
- Long gap in communication
- more info on the process/timelines was required
- At the start yes, as the writing teams were being formed, a definite no in the middle as things became muddled about who was in some of the sparsely populated writing teams, near the end of the process yes.
- No there was almost none-not even the names of suggested experts until the draft was complete
- More or less. Email messages proved not to be an efficient platform for this kind of work.
- Communication was OK from chapter lead to me (sub-chapter lead), but tended to involve very short deadlines. I hope I communicated effectively with the rest of the writing team.
- Very much dependent on the actual convener. I think the whole process could gain on better communication on what is expected and when for the various roles
- there was little communication after the initial in person workshop

Planning/Functionality

- I wish that the in-person meetings could have been scheduled further in advance so we could ensure our availability.
- As my comment above, deadlines and timelines shifted. Ultimately needs were accommodated but initial requests raised angst.
- The required scope and focus did vary a little
- Yes and no. I found the communication good, but lack of time and knowledge made it difficult for both convener and lead of writing
- It is too easy to be critical! However, there was significant confusion around the link to WOA 1 and what WOA 2 was actually intended to do. There seemed more of a focus on the word count than anything else. I was not empowered.
- The entire structure and roles of lead, convenors, writing team is not at all clear.

Other comments

- Perhaps convenors is the proper term for what I called higher-ups above. No, the convenors were terrible.

- I wouldn't know who qualifies as 'convenor of the writing team'
- I finished up being a convener
- The problem with the leader was really bad - he seems to be the owner of the group. In some cases, I had opportunity to write him several times without response. Sometimes this people are more interested to be leader than to lead.
- I did not follow enough the development of this chapter
- I cannot answer this question because all my interactions were with the conveners
- Not always
- No convener

7. Were you provided with adequate information on the structure and content of chapters?

Yes: 76, No: 29, No response: 24

All comments associated with a no reply

- yes, except for the differences in the outline and template
- plenty of ambiguity, particular in terms of lengths for individual contributions
- we learned more day after day on how we should do
- Not really
- Little guidance but it did work out
- at the beginning not, but day by day we saw the way
- I would have liked more. There was some but this was often not followed.
- The guidance was not as clear as I would have liked
- See above comments. The loss of a coastal community's chapter is absolutely indefensible. The writing team for the chapter was ready, but never properly activated. The result will be an inadequate overall assessment.
- At the beginning there was not clear about how we should structure the chapter, then this were improved
- It was confusing at the beginning and the structure was not clear. Only after several rounds of discussions the structure and content requested was better understood by the authors.
- Little guidance
- We changed structure and content
- Perhaps could be interesting for the next time that for each chapter - UN get into contact with some key institution related with the issues.
- Not initially
- at time it was not clear how much we could depart from WOA I structure, best to either let the writing team choose freely or template precisely the structure.
- see previous comment. Information and follow up was wholly inadequate
- At the meetings there was a lot of confusion about structure and content.
- It could have been better, but I joined the process mid-way
- Expectation was Not the same between workshop and review
- At the beginning no, because on the way of writing, structure was changed
- It came a bit late during the process, so we had to re-organize everything.
- According to the requirements, the content of the writing has been modified and improved.
- there is continuing confusion about chapter 7AB & 7C; the writing teams proposed 7C should comes first in chapter 7 but I'm not sure it does

8. *Did you consider the lead on your chapter to be adequately experienced with the content of the chapter to support the writing team in the development of the chapter?*

Yes: 97, No: 8, No response: 24

All comments associated with a no reply

- OK for one chapter, not sure about the lead for another chapter as the lead did not do much as far as I know (at least 6 months between the mails)

9. *Were you provided with adequate information on your role in developing the chapter?*

Yes: 85, No: 21, No response: 23

All comments associated with a no reply

- I was provided no information. An email stated that my section was being cut because there was limited knowledge and data on the topic - which is a sign of little knowledge of the field
- we learned more day after day on how we should do. may because of my first time
- Kinda --I just wrote what I thought would be useful, pertinent and helpful
- I think this could have been better. Roles were not clearly defined instead of all of us doing virtually everything
- I was not sure what the boundaries of my duties were. They seemed to change (increase) along the way.
- The chapter lead tried, but as noted above the higher-ups ruined it.
- It was clear the authorship but not the order of the authors. The order was revealed after we finished by the editors.
- The sections in the chapter were supposed to be the same as WOAI but they were not sensible, e.g. seagrass is not macroalgae
- WOAI was inadequate as a template.
- Perhaps it is necessary more integration by UN with different stakeholders (Private Sector, Governments, NGOs, Academy) to bring information or websites which these people know that Regular Process exists.
- As the writing team was very small for one of the chapters it was very much who was willing to cover key topics and roles expanded to fill strategic gaps
- As said before there was very little information on all aspects of writing the chapter
- As previously said, I was contacted by the leaders in different moments of chapters developments and the whole process were very heterogeneous.
- There was a need for a more coherent briefing
- there was difficulty communicating with the leader
- Same comment above on role of lead, co lead and convenor. The section I worked on was developed very collaboratively
- We seemed to find out after we had written something, rather than before. Lots of extra work.
- Not always

10. How well did you think the writing team collaborated together to develop the chapter?

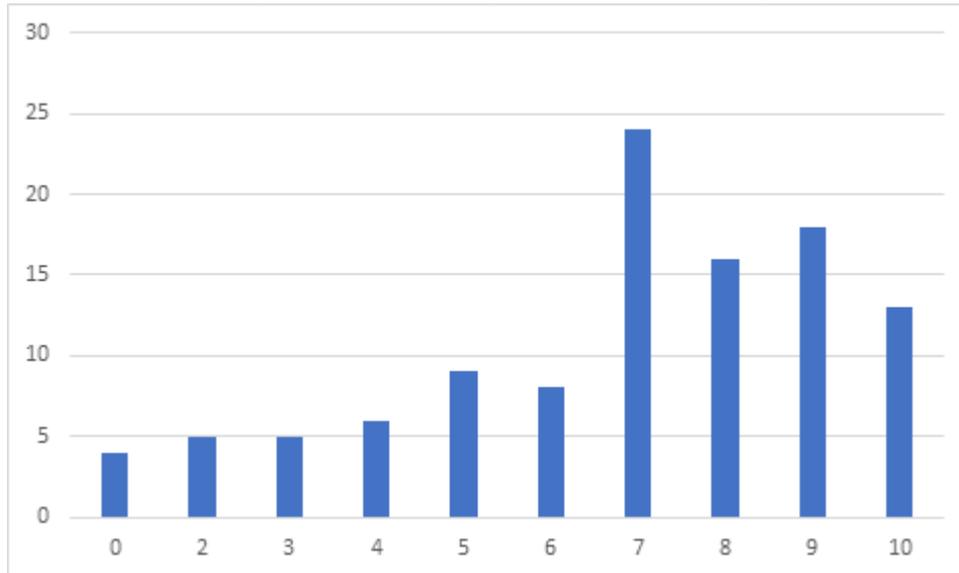


Figure 3: Team collaboration in writing teams from 0=very bad to 10=very good. (Y-axis reflects the number of responses in each category).

11. Comment on collaboration

Contribution

- All persons collaborated at the initial stage to structure and develop the chapter. As time past and diverse changes were requested by the coordinators a large number of persons in the writing team collaborated together to develop the chapter, but we lost some. At the end with so many requests from teh coordinators only a few enthusiastic colleagues contributed to changes. The lead author coordinated well the effort in spite the so many changes requested.
- There were many names assigned that had never replied a message. There was a lack of commitement sometimes.
- It was mostly a smooth collaboration aside from those that didn't participate.
- The writing team was very heterogeneous, with some people contributing a lot, and others not at all.
- Some members could not be involved in person meetings. At times too much burden was transferred to the coordinator.
- The lead created a substantial draft (~50% level), with one other writing 40% and another actively reviewing / commenting. Others, including 'co-lead' contributed minimally.
- Some authors (very few) did not collaborate with the information needed from their regions of expertise.
- I suggested both my collaborators and they communicated and worked very hard to get the chapter written. The original collaborator did not keep to his deasdlane nor did heoffer anything towards the chapter.
- I received minimal input from most members of the team
- Part of the author team contributed effectively, others only modestly.
- As lead for my sub-chapter I essentially wrote the piece myself. Comments from the rest of the writing team were fairly limited, although helpfully geared towards their especial interests, which tended to be in areas where my own knowledge was more limited.

- Collaboration was excellent between those making contributions to the writing of the chapter, but several of the writing team only ever responded to the initial email agreeing to be part of the writing team and provided no new text or feedback on the contents of the chapter.
- I did not receive input from most of the members.
- Very few members contributed to the process.
- Multiple people wrote about the same thing, and some areas were left uncovered.
- Team members dropped out. Remaining team members worked well together.
- Some contributed well, many contributed not at all. I don't blame the team members - trying to get a writing team to work together in the absence of any actual meetings was virtually impossible. The resulting subchapter reflects who contributed (particularly in terms of regional coverage), rather than necessarily the most important issues.
- Unfortunately, very few experts contributed to the writing of the chapters that I participated in
- Some collaborated more than others, but the communication was excellent.
- The section I worked on was developed very collaboratively. Unfortunately, many people who committed to make contributions at the workshop never followed through.

Planning/Functionality

- no proper collaboration, hardly any meetings in-between or guidance on the inner workings
- People contributed when they could. There were not many meetings for collaborators to talk with each other (my fault as lead convenor)
- Contributors were generally excellent though of course they have busy schedules and the need for more frequent updates may have helped them manage their time better. There were for example times where we were asked to turn something around in a couple of days and of course that is not feasible unless we are forewarned.
- Not much cross collaboration - really only between the lead and each writer, not among writers. This is not unexpected given the geographic and area-specific tasks given.
- I think our lead could have been a little more forceful in the structure - we had many back and forth iterations that were kind of like a stale mate because of differences in opinion. I understand equal contributions but some has to steer the ship at the end of the day.
- There was essentially not much time left to put together the thoughts of individual co-authors.
- Perhaps more integration in a pre-phase of the program.
- Since I chose the co-authors we collaborated very well. Unknown to me other experts had been identified by UN as potential collaborators but they were not made known to me! When I found out after the chapter was written I was embarrassed and apologised to them.
- All members had the opportunity to review the final products, but along the development of the chapters I did not see a good flux of information among the members. This was due to the centralization of discussions on the leader,Äôs email (some messages were sent directly to leaders, others to the hole group; and the same happened with the answers).
- The f2f meetings were very beneficial from the perspective of discussing with writing colleagues what was going to happen and to rapidly iron out some issues. However, between meeting collaboration was not so smooth as people were experiencing other pressures on their time. Momentum was rapidly lost. There was a need to emphasise that collaboration required all the team to take a wider perspective than their immediate geographic location.

- The collaboration was adequate - I felt the initial lead was very narrow (hence also why I was invited presumably) but there wasn't really a structured process of identifying what was missing, just write your bit
- I would prefer skype meetings and teleconferences instead of exchanging only e-mails. On the other hand, I understand the difficulty with the various time zones and availability.
- It started with each writing member focusing on his or her section, before trying to reconcile the sections. More initial work should have been done, i.e. each writing member prepare and share his/her outline first for overall comments. This would put other members on notice of what is likely going to be covered and what note.
- Face to face meetings are incredibly important to build collaboration. I had the opportunity to attend the workshop in Doha but additional in person meetings or scheduled teleconferences would have definitely improved the writing process and end product.

General comments - positive

- I chose the team and led the chapter, so I may be biased here, but I thought that everyone performed very well in their roles, and there was no conflict among team members with respect to their roles.
- In my case, the size of the team was relatively small and easy to manage. Members of the team collaborated quite well and on time.
- all adults; worked well together
- I'm not sure who the team was for my topic, but the people who stepped forward to contribute collaborated very well
- At least there was good collaboration within each team.
- Based on responses from members I think the level of collaboration was okay.
- Collaboration was extremely fruitful.
- The leader (s) worked timely, I mean, they respond quickly to changes or modifications to the manuscript.
- We did have some mildly conflicting views in the team but I think that is healthy in a writing team on a broad topic
- The actual efforts of those contributing to the coastal communities' component were very collaborative, even enjoyable. The chapter lead built that material into a good package. The higher-ups then decimated it. Be more careful in choosing those people in the future.
- Again, we were maybe missing a couple of people, but in general I was really pleased with the contributions of my co-authors.
- I think collaboration always could be increased, however there is so little space to write that it ends in a good proportion between collaboration and results
- It was great, every body put in. Enthusiasm and capacity did dwindle as time went on so the job did disproportionately fall on some than others but everyone did legitimately try to be engaged.
- excellent
- The lead on the chapter was excellent, knowledgeable and well qualified for the task. The success depended very much on the lead pulling it all together.
- As is often the case for documents like WOA, the writing team had different time availability to work on the chapter, the team worked really efficiently to play on each other's strength both in pushing the document forward when people had time, but also through task allocation and revisions. I was particularly pleased that the whole team stayed engaged throughout the review process as well. Overall, it was a really positive experience.

- Highly communicative
- Writing on behalf of your Nation is time consuming and there was few (if any) who had this knowledge combined with time available. Writing a Global Assessment taken into account the diversity of countries around the globe, is almost important within the number of pages given.
- I didn't interact with the other authors and contributed my text independently from the other authors. The Lead did a great job at pulling all our contributions together in a coherent piece. I think limited interactions with other authors is fine because full consultation/collaboration can be very time consuming and we all have other jobs to do in parallel. So, this process is fine as long as the lead has the capacity to pull everything together at the end, and only then consult back with authors
- It was a pleasure to work with such a diverse team, on a very broad subject. Distilling all this knowledge into a short chapter was both challenging and a positive experience.
- Both of the conveners of this chapter collaborated very well with the writing team to develop this chapter
- the team, when requested, met the demands with attention and high quality
- i think that it seems adequate
- The collaboration was fantastic.
- Very good collaboration. Leader was very fine
- Our writing team had great communication and it was always positive to keep moving forward. It was easy to work with team members
- Young scientists have benefited from the experience of leaders in this chapter.
- The only comments is the fact that it would be useful the more colleagues collaborate (form part) of the writing team, in order to better cover some regional/specific aspects
- After adding members to the writing group, the cooperation is more perfect.
- It is suggested to divide the writing content into specific parts.
- The convener's contribution is enormous.
- Collaboration was great but a considerable amount of the information provided was cut due to page limitations, which is not satisfying.
- Very participative
- The lead was available and communicated informations to us in time. He also reminded us the deadlines for returning contributions
- It is appreciated that most of team members are full time employees of their Institutions and undertake the assessment as a voluntary activity as they have to put more effort in their areas of employment. However, the team was generally collaborating thanks to ICT facilities.
- It is noted that most of the writing team members are employees and have to address their responsibilities of their jobs and therefore undertake the assessment on voluntary basis. This gives a challenge but thanks to ICT Communication this challenge was partly addressed to allow suitable collaboration.

General comments - not so positive/ negative

- Again, perhaps a symptom of being brought in late but the whole thing seemed very disjointed and but for the efforts of the Lead we would not have achieved an outcome.
- This varied for the different chapters. Everyone has been busy, so responses have been intermittent
- Not enough collaboration. The success was mainly due to the lead author's effort.
- Almost no collaboration among different subsections, so can improve.

- I felt like there was hardly any collaboration and it was often unclear whether I was supposed to only work on my part of the Chapter or whether I should comment/review the other parts.
- The composition of the team was a bit biased nation wise.
- The opinions of the writing group were not unified at the beginning. After reviewing and enriching the members of the writing team, it was finally improved.
- I do not have information that will enable me to answer this question
- This is very much depending on the persons that the team consist of. Worked quite well for one chapter, but chaotic for another chapter (lack of lead I suppose)
- On the national level, besides the remote (email) contacts a face-to-face meeting occurred to explain the process and improve the contribution. On the international level, remote contacts (email) has occurred but a physical meeting was missing to better discuss strategies on the way to discuss the gaps of information or knowledge.
- cannot comment because I did not follow enough the development of this chapter

12. Was the development of the chapter well planned and adequately coordinated?

Yes: 75, No: 30, No response: 24

All comments associated with a no reply

Coordinating content

- we may creat local work with participants from same country before going to the workshop
- Mostly yes but not on including global findings. These can be tough to find due to uneven coverage in the literature and time it takes to collate the info.
- It was clear that leader,Ãs other professional duties were competing with the development of the chapters. In function of this, the development of the text was very irregular.
- This was a challenge, in part because it was not clear what the product was going to be.
- the lenght/context of the chapter were very limited to include the necessary subjects needed to be written.
- The chapter was fully developed, then on review additional authors invited (well, me at least), but no process for identifying what was really needed.
- the chapter building process could have been better organized
- It did not seem clear to all writers that this was to be an evaluation of the change since the last report. This was made more difficult in that this chapter covered sections from many chapters of the previous edition.
- yes and no. Outline was provided but no instruction on a adequate assessment method that I, as a lead, could instruct to the writing team

Coordinating team members

- I just wish there had been time and funding for an in-person workshop of Chapter conveners, authors, and reviewers.
- may I suggest that periodic skype-style meetings of the writing group would have helped coalesce it and reduce the (rather lengthy) time line.
- Although well planned, failure to meet in person (as originally planned) potentially hampered the dialogue - those who contributed most had met at the initial workshop.
- I was the convener, and I think I could have done better at timing and communicating timelines with co-writers. However, most were very responsive and we got the job done.
- Marco Boccia was an excellent coordinator but the joint convener did not coordinate very well.

- As I said before the team was gathered too late
- It was all happening simultaneously and when there was a deadline we were only given very short notice.

General comments

- Planned yes, coordinated not so sure
- Sort of -it seemed to turn out OK
- Depended on the chapter, sometimes yes and sometimes not so much.
- Better than WOA1 for sure but still a bit messy
- Terrible. The worst you could possibly imagine, thanks to the destructive approach of the higher-ups.
- Sometimes yes...sometimes not.
- Yes, among the writing team; not from WOA front office
- There was room for improvement
- Because the last plan was adopted on the way of writing
- OK for chapter 11, chaotic for chapter 10

Reviewers

1. *Were you provided with adequate information on your role and the timelines associated with the assessment?*

Yes: 13, No: 3

Comments

- it was a little confusing, even though I wanted to collaborate, the information and the timeline was not very adequate
- Not yet
- I found the whole process rather confusing and disjointed, notwithstanding considerable help from some individuals.

2. *Were you provided with adequate information on the review process?*

Yes: 13, No: 3

Comments

- I received emails offering to review because I was not included as the writing team with time and information enough, it was confusing for me... I accepted to be reviewer of what the group had already written
- Not yet
- I found the whole process rather confusing and disjointed, notwithstanding considerable help from some individuals.

3. *Did you feel you were provided with enough time for reviewing a chapter?*

Yes: 13, No: 3

Comments

- Of course, yes, but it was tight with the second one. Luckily my sections were not overly long.

- I had to do it in a short time, during a short holiday I was taking. I wrote all these details by email explaining the matter, but tried to do my best to collaborate even though it was not the topic of my expertise (I had passed my expertise before)
- I haven't reviewed any chapter yet

General comments

Planning

- Involve the chapter authors earlier in the process and request input when scheduling the regional workshops. I typically schedule meetings almost a year out, so an invitation that comes only a few short months from the date is highly unlikely to be successful.
- Perhaps the time between the call to make the document and the final delivery of the document should be shortened, as it may be outdated
- Inclusion in a regional meeting would have been very beneficial. Invites came very late and unfunded.
- Initial dialogue suggested the need for multiple meetings with a range of ocean experts. For me, this turned out to be a single meeting & therefore 'fizzled out' with regards to developing useful cross-disciplinary dialogue or building a communication network. The challenge of having a short chapter with global coverage also meant that its technical content was somewhat diluted.
- I don't think it was necessary to bring so many people together for the meetings. The UN should be promoting small carbon footprints and bringing 30 people to Palau to speak for 20 minutes each does not do that. It was a useful experience but likely one that didn't need such a destination or attendance.
- I was invited to contribute to the writing of one chapter (energy in the marine environment), however there was only one author who apparently drafted the section and was for an agency which had a potential conflict of interest. I declined to contribute. Greater time needs to be provided to setting up the writing panels to avoid this situation in the future.
- The regional workshop relevant to the chapter I was on the writing team for was held in Ecuador the week before Christmas, which made it almost impossible for most of the team to attend. This was somewhat disappointing and an oversight, I believe, by the organisers.
- My experience of the process so far, has been on the whole, a positive one, in that a document was developed from a synthesis of recent works on the topic. Yes, it could be a more streamlined process and part of that could be solved by convening writing teams as early as possible. For some chapters this is a relatively easy task as the groups know each other well and work together frequently (e.g. benthic communities), while for regions or more generic chapters a broader group of experts is required.
- Experts should be formally invited by DOALOS. A list of members and short resumes should be available to the others. One general workshop should be made in a central venue for instructions (DOALOS) and chapter structure discussion (team). Two or three experienced experts should write the draft. Text then would be put in a collaborative writing platform. Team activities should be managed by DOALOS people (information exchange, compilation of information, etc.). Expert leader will act as scientific advisor. An online platform should be used for communication exchange (like Google Groups)
- Regarding my experience I do think that there is a need to improve the expertise of the pool of experts in some areas and from some regions of the world and also to motivate some of

the members of the pool of experts that did not answer or participated or have not complied with the deadlines agreed.

- Preparing such a product is a massive challenge that cannot be underestimated. Those who committed to deliver the product should be given great applause. For most, WOA2 was one of many projects and where there was confusion there was a temptation to go and do one of the other pressing issues. Small hurdles were actually quite debilitating as there was always something else that could be done which did not present such hurdles. A challenge was to encourage authors to use their expertise in their geographic area and beyond. This required more time to read relevant literature.
- If workshops are planned in the future it will be useful to explain better the aim of the World Ocean Assessment. It will be desirable to make members of the writing team understand that they need to collaborate, answer the questions and provide the information on time and not only indicate that they are interested in collaborating and do nothing else. There is a need to have a more robust team of certain regional areas of the world. It also would have benefited if the Group of Experts have reached the maximum members allowed for certain geographical areas
- as a suggestion, regional events can be better targeted. There is a lack of greater commitment from leaders and the construction of a process (questions and answers) aimed at answering the particular chapter questions for each region. Often the groups formed in regional events spent much time organizing tasks before actually discuss matters relating to the chapter.
- An adequate regional representation of the writing teams will be desirable. Writing team members need to be better informed about the importance of their role. Writing team members need to comply better with deadlines and answers to queries. Reviewers need to send their comments on time
- The organization and content of the 2nd assessment was different than the 1st assessment. This is not appropriate for comparative purposes. 2. The regional meetings are a good idea, but the conveners should be invited and their travel costs paid for by the sponsors.
- The in-person workshop was by far the most important tool to developing the content and for me to understand the process and improve as a contributor. More opportunities for in person meetings would be extremely beneficial. I think it would also benefit from additional structure from the conveners, to set expectations for additional teleconferences and reminders for progress milestones.

Guidance

- I was glad to participate where I could. But we could have used more guidance on the scope and purpose of the work, the timelines and who was going to review the final chapters and decide what would go in the final document. It seems to be up to each country now. Will we get a chance to review the final?
- I would like to have had more guidance about the process, the timeline, and how our input would be reviewed. Still don't know the final review process before UN accepts the report and how it will be published.
- I would appreciate much greater participation as a member of regular processes than just making some contribution in framing a chapter. At the initial stages, I sent several mails, wondering what role I am going to play as a member of the expert pool. Unfortunately,

there was hardly any response till the mail on writing a chapter came from Dr, Alana Simcock on 27th Jan, 2020. I hope we receive more scope to widen our participation.

- The whole experience of writing this chapter has been very frustrating due to the almost complete lack of information and guidance as to requirements/time lines/even potential authors. I then had to try and find referees at the last minute!
- I found the whole process rather chaotic, with limited editorial oversight and no clear vision of what was expected of us. The end product will inevitably reflect the interests (and biases) of the most active authors, rather than a really comprehensive overview of the state of the world's oceans. Active authors were not necessarily those best qualified to write the key sections.

Information flow

- I think information should be sent to all members of the team instead of always through the leads
- More earlier work should have been done on telling the participants at Odessa what we'd be doing and how. Odessa meeting should have been better organised,
- As stated already several times, everything has been very much dependent on the actual persons taking various roles in the process. The whole process needs to have a better communication, from planning the workshops (at least it is decent to know which chapters to discuss before you make your reservation to travel to a meeting). Also, the various roles would have been useful to have been informed about, and probably the persons that had these various roles/responsibilities would have performed their duties in a better way if they would have known their roles/responsibilities.
- Information about regional workshops tended to be at rather short notice. This tended to make travel costs more expensive. Longer notice in future exercises would be helpful in times of tight budget restraints.

Content

- The theme of our section was expanded to include continental slopes (in addition to canyons) after I pointed out these were missing from the WOA 1 and WOA 2 scoping. It would have been useful to have external community review of the outline in advance.
- Arctic warming, methane feed-back loop, consequences of ice decay for climate and weather are points to be studied very carefully
- I initially was more than happy to participate in the WOA II process, however, having been through this process, I am not sure that I would participate in any future WOAs. What was required in terms of text for the paper seemed to change. The level of information that we as a writing team thought was important was not deemed so by those wanting the assessment to be undertaken. The writing team/their institutes are not paid to do this work and yet the pressure put on the writing team was excessive - getting comments back within 24hrs. Very disappointed.
- There are other products such as the IPCC which deal with climate change for example in a far more comprehensive way. It seemed to me that in so far as possible, leaving CC impacts out would have been better, knowing it was going to be handled far more comprehensively in regional chapters of AR6. Likewise, having been a Lead Author in the IPCC AR5 process its a good example of how to coordinate such an assessment.

- This is a very important work, if possible, it should be well utilized to define world ocean policies, and probably it will be necessary to think in a third part, with situations as the present pandemic and world maritime commerce among other subjects.
- My understanding after WOA I was that II would be more data driven and structured process. So, I was disappointed to see that it was basically the same - a huge pile of written chapters but with little analysis or temporal coherence to be able to assess change. Are the oceans better off in WOA II than I or worse? Can you tell just from reading them? And how much of them do you have to read to be able to tell? I hope WOA III can be much more data driven, based on the EOVs/EBVs and other similar processes, and building datasets (e.g. the IPBES core indicators), that will be used each time.
- I would like to add to this assessment the situation of continental shelves and the economic benefits of underwater resources. In addition, organize webinars for members at each stage of the procedure.

Format

- The space limitations were problematic and made for a chapter that offers very little real analysis. There simply wasn't room to discuss anything in detail. As such, the chapter will be inconsequential.
- to finish my last comment on workshops: much was uncertain in the early stages, and page-restrictions made it impossible to not have a very strict structure. Hence did the structure developed as we developed the chapter. There is a strong need to connect with international data-holders, who have already done Assessment or who can easily make these assessments. The PoE need to be connected to Governmental Institutions in order to be able to make a national assessment.
- The exact length of the chapter (number of words) was not clearly defined from the start and this would have been helpful.
- the word number assigned for the chapters was very little. this leads to deletion of some valuable information.
- There is still room for further elaboration in this chapter in terms of basic concepts, composition, functions, etc. at present, limited by space, it is only summarized in a few sentences. The development of each region, some of which are more detailed, some of which are only summarized in one or two sentences. It is suggested that more space can be added in the follow-up so that it can be evaluated in a more balanced and comprehensive way.

Writing process

- Support for an actual meeting with time to write would have been useful.
- It was quite a lot of work to be the convener of just a sub-chapter. Perhaps this depends on the contributions of the co-authors, but it was not an easy task.
- More care should have been taken in describing mangroves seagrass , macroalgae marine plants , saltmarsh , phytoplankton, microphytobenthos . A close check on where the master copy of the draft chapter was at any time.
- The writing process for WOA has been poorly co-ordinated when compared with IPCC
- Being able to be in the room together allowed us to take our ideas from description to analysis and was extremely helpful.

- The writing team should fully support the convener and submit materials on time and with high quality.

Review process

- The reviewers for the first draft had no clue that the writing teams had been working under significant constraints, both in terms of time and resources. Rather than providing constructive feedback, some of the reviewers were nasty and obnoxious with their comments. WOA should mandate orientation for the reviewers so they can be a constructive part of the process.
- I thought some of the editorial comment during the process strayed into softening the message developed by the writing team. I was a bit uncomfortable with the process but can live with the outcome
- After submitting the peer review results, there was no response.

General comments

- My only comment is to congratulate the great effort to achieve this grandiose knowledge contribution.
- This is a global process with many people involved. I think that it is a tremendous milestone to get this done. Some of the deadlines were overcome and further complicated by the COVID-19 issue. Overall, I am satisfied with the process and I am glad to be part of it.
- No. Thanks for the survey! I appreciate your reaching out.
- An experience of unforgettable scientific growth
- A magnificent experience of unforgettable scientific growth
- It has been a pleasure to have a grain of sand on this work.
- Though this was my first experience and there was a learning process, I did enjoy it and would happily contribute/participate again.
- It was a nice and very instructive experience.
- Please keep me on your books happy to help and assist in any way that makes sense in the future. I would like to get a copy of the final collation? Please?
- I am satisfied with the results and the equitable way used throughout.
- It was a really incredible experience. I'd like to thank you very much for everything. To Marco, Lika, Elena, Simone, Anastasia! You are really great! Should be more active. Especially should be given more emphasis to the capacity development and fill the data gaps in diff. developing maritime country, what mentioned in the recommendations of 'Global Regular Process', otherwise many objectives of this mission will never be fulfilled, like SDG - 14 by the less developed maritime country like Bangladesh. So, my request would be support with fund and others technical support through UN agencies in priority area of Blue economy in Bangladesh
- Congratulations and courage for the next assessment
- Generally very good experience and the quality of the near-final assessment report is good and useful
- It is a great endeavour. Thank you for the opportunity!
- Congratulations for all team member and especially to the leader for the prompt react to finalized chapter
- It was a pleasure to be part of this team and write the chapter. Thank you

- I hope I was able to collaborate as I really was expected to
- As you can see, I haven't yet had an effective participation in the process. Having finally been assigned a topic of work, I look forward to start contributing. I accept (and thank) suggestions!
- no thanks, in general the experience was useful and I would like collaborate in the future.
- It is an honour to be involved in this important initiative, and I hope that I made a useful contribution (I believe I did),
- Non indigenous organisms are a changing process, and international cooperation in this field is just in its infancy and has a long way to go.
- Thanks
- This assessment is a framework to exchange knowledge and experiences. It provides a network of information and collaboration.