# Set of Options developed by the Group of Experts established pursuant to General Assembly resolution 65/37

## I. Introduction

1. Amongst other things, the General Assembly, in resolution 65/37 of 7 December 2010:

(a) Decided to establish a group of experts to be an integral part of the regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects (the "Regular Process");

(b) Requested the members of the Group of Experts who had been appointed by Member States pursuant to paragraph 180 of General Assembly resolution 64/71, to continue serving on the Group of Experts for the duration of the first phase of the first assessment cycle;

(c) Noted that the first phase of the first cycle of the Regular Process (2010-2012) will provide for the preparation of key questions to be answered by the first integrated assessment, at all regional levels, to ensure an effective science-policy relationship and the participation of all relevant stakeholders, in particular local experts, in defining specific objectives and scope of the assessments; and

(d) Requested the Group of Experts on the Regular Process to work, with the assistance of the secretariat of the Regular Process, to develop a set of options necessary to achieve the deadline of 2014 recommended in the report on the work of the Ad Hoc Working Group of the Whole to recommend a course of action to the General Assembly on the Regular Process in 2009 (A/64/347, annex), for the completion of the first cycle of the Regular Process, to be presented by the Group of Experts for consideration and adoption, as appropriate, by the Ad Hoc Working Group of the Whole at its meeting in 2011.

2. As of 26 January 2011, almost all experts appointed by Member States under paragraph 180 of General Assembly resolution 64/71 of 4 December 2009 have confirmed their availability to continue serving on the Group of Experts.

3. This document, dated 26 January 2011, on a set of options necessary to achieve the 2014 deadline recommended in the report on the work of the Ad Hoc Working Group of the Whole to recommend a course of action to the General Assembly on the Regular Process in 2009 (A/64/347, annex) was prepared by the Group of Experts in accordance with paragraph 212 of General Assembly resolution 65/37. It has been prepared by electronic correspondence, and therefore lacks the benefit of face-to-face discussions. Any further relevant material that the Group of Experts is able to prepare will be presented to the meeting of the Ad Hoc Working Group of the Whole to take place from 14 to 18 February 2011.

4. This Set of Options covers the following issues:

(a) Working methods to produce a first integrated assessment of the global marine environment by 2014;

(b) Outline of the questions to be answered by the first integrated assessment;

(c) Engaging with existing assessment processes;

(d) Data handling;

(e) Communications strategy; and

(f) Timetable to achieve the deadline of 2014.

5. The meeting of the Ad Hoc Working Group of the Whole in 2010 recommended (in paragraph 17 of its report (A/65/358, annex)) that capacity-building is essential for the implementation, and is an integral part, of the Regular Process at all stages of its implementation. Furthermore, the Ad Hoc Working Group of the Whole recommended, in paragraph 28, that the Group of Experts would conduct its work through, inter alia, a Capacity-Building Working Group. In the light of these conclusions, the Group of Experts has prepared a separate document entitled: "Information Material on steps for capacity building". This document is also presented to the meeting of the Ad Hoc Working Group of the Whole for consideration, as appropriate.

6. The Set of Options outlined in the present document is based on the framework of the Regular Process as endorsed by the General Assembly in resolutions 64/71 and 65/37. General Assembly resolutions 64/71 and 65/37 have, respectively, endorsed the framework for the Regular Process, and reaffirmed the principles guiding the Regular Process and the objective and scope of its first cycle (2010-2014) developed by the Ad Hoc Working Group of the Whole in 2009. Relevant elements of the overall framework can be found in Annex A to this Set of Options.

## II. Options for working methods to produce a first integrated assessment of the global marine environment by 2014

7. The preparation of the first integrated assessment report will require a lot of effort from experts to review existing assessments and other information and bring the material together into an integrated, comprehensive and consistent report. The options for the working methods to carry out the work needed to produce a first integrated assessment by 2014, and their advantages and disadvantages, include:

(a) *Setting up a team of experts who would devote substantial amounts of dedicated time to the work of the Regular Process.* The report on the results of the Assessment of Assessments (A/64/88, annex) foresaw a dedicated team of experts – the Expert Panel – which would be able to devote a substantial part of their time (25% - 30%) to the work required by the Regular Process, and which would be aided, where necessary, by other experts drawn from a Pool of Experts established either by creating a new pool of experts, by making ad hoc appointments or by using existing lists of experts.

The Expert Panel would themselves compile most of the information, draft most of the text, and agree on the final version of the integrated assessment. This would ensure a focused and effective input from experts. However, in response to the recommendation on input from experts, the General Assembly, in resolution 65/37, decided to establish a group of experts to be an integral part of the Regular Process. Nearly all the experts nominated to the Group of Experts pursuant to resolutions 65/37 and 64/71 have full-time (or practically full-time) jobs in addition to being members of the Group of Experts. States nominating the experts have not been asked to free their nominees from other tasks. Consequently, most experts are unlikely to be in a position to devote the substantial time necessary to respond to the demands of the Regular Process if the work was to be done in this way;

(b) *Hiring a team of consultants to assemble the information and prepare drafts of the first integrated assessment, under the guidance of the Group of Experts.* This could equally provide a focused and effective input from experts. Such a team of consultants would probably be significantly more expensive than the arrangements proposed in the Assessment of Assessments report described above. Given the limited funds likely to be available from the Trust Fund established pursuant to paragraph 183 of resolution 64/71, this option does not seem to be practicable. There would have to be sufficient resources to meet the costs of a team of experts of sufficient breadth and depth of knowledge.

(c) *Inviting experts to volunteer to carry out the work of reviewing assessments and other information and preparing drafts, under the guidance of the Group of Experts.* This would rely on establishing a team of contributors from volunteers. Members of the Group of Experts would form the core of the team, to the extent that their other commitments allow. Other experts would be chosen from those nominated by States and other relevant organizations. The volunteer team may need to be supplemented by some paid contributors, if resources permit, in order to enable an equitable geographic balance within the team.

8. In present circumstances, the Group of Experts considers that option (c) is the only practicable way forward to meet the deadline of 2014, because:

(a) Most members of the Group of Experts will not be able to devote more than a limited part of their time to the Regular Process;

(b) The preparation of the first integrated assessment will require many areas of expertise not represented in the Group of Experts and would benefit from the participation of experts with diverse backgrounds and perspectives within individual areas of expertise;

(c) The use of volunteers will make it easier to achieve an equitable geographic representation among contributors; and

(d) The use of volunteers will make the available resources go further.

9. If the Ad Hoc Working Group of the Whole approves this option, the Group of Experts would suggest the need for:

(a) Criteria which volunteer contributors would have to meet. These criteria would have to include suitable qualifications and established reputations, equitable geographic distribution, an appropriate range of disciplinary expertise and the ability to prepare drafts in an appropriate language (see paragraph 32 below). If a management and review mechanism is established, and if considered appropriate, it could be given authority to approve these criteria on the basis of proposals from the Group of Experts;

(b) An early invitation to Governments to draw to the attention of relevant institutions in their countries, and to intergovernmental organizations to draw to the attention of institutions with which they are in contact, the urgency for appropriate experts who meet the criteria to put their names forward to them as volunteers, and to urge those institutions to support the experts' voluntary participation;

(c) An invitation to Governments, intergovernmental organizations and non-governmental organizations in consultative status with the Economic and Social Council (ECOSOC) to put forward names of suitable experts to the Group of Experts; and

(d) Confirmation of the role of the Group of Experts, with the support of the Secretariat of the Regular Process, in organizing the inputs that are needed from contributors, and in developing the first integrated assessment in line with the arrangements approved by the Ad Hoc Working Group of the Whole.

10. Individuals associated with the preparation of the first integrated assessment report would be entitled to the legal regime of article VI of the 1947 United Nations Convention on Privileges and Immunities, in order to ensure their complete independence and protection from possible legal action in connection with their activities.

11. The Group of Experts, with the support of the Secretariat of the Regular Process, could then:

(a) Decide how much of the work they could do themselves, and, in the light of that, select other experts to carry out the remaining work from among those nominated by States, intergovernmental organizations and non-governmental organizations in consultative status with ECOSOC;

(b) Where appropriate, agree with existing assessment organizations[1] for them to carry out the tasks of lead drafters of working papers for specified issues in the areas where

[1] These include organizations managing programmes for Large Marine Ecosystems, regional organizations under the Global Ocean Observation System (GOOS), regional fisheries management organizations and arrangements and regional seas organizations.

they have competence, either by providing relevant material that is already available, or by organizing the production of new material;

(c) For other issues where working papers are needed, agree with selected lead drafters (including, where appropriate, groups of drafters) to:
   (i) Provide draft working papers of an agreed length, covering a specified issue (or the regional aspect of a specified issue), by the date specified in an agreed timetable, and
   (ii) Revise such working papers in the light of comments received under the process described in paragraphs 13 and 14 below, again by the date specified in an agreed timetable;

(d) Review the material emerging from these activities to ensure that the necessary material is forthcoming, and take any further steps necessary to fill gaps or resolve contradictions;

(e) Agree, at the appropriate time, with selected lead drafters (including, where appropriate, groups of drafters) or existing assessment organizations for them to:
   (i) Draft, on the basis of the working papers, draft chapters of the first integrated assessment by the date specified in an agreed timetable,
   (ii) Revise such draft chapters in the light of comments received under the process described in paragraphs 12 and 13 below, again by the date specified in an agreed timetable;

(f) Review the draft chapters and, on the basis of them, prepare a draft of the first integrated assessment;

(g) Arrange for the peer review of that first draft, and for its review by experts from States and intergovernmental organizations, and for the revision of the draft in the light of the outcome of those reviews;

(h) Agree the final text of the first initial assessment for presentation to the Ad Hoc Working Group of the Whole.

In all these tasks, the Group of Experts would have to ensure that the lead drafters and other contributors have adequate qualifications and represent an equitable geographic distribution.

12. In addition to the lead drafter for an issue (whether an individual or a group), the application of the principles of the Regular Process would be promoted by creating a mechanism by which a wider range of experts and interested parties can contribute. The Group of Experts therefore proposes that a panel of volunteer "consultors" [2] should be identified for each issue (or group of issues). To ensure that the process remains within manageable proportions, the number

[2] This term has been chosen to emphasize an active role in the preparation of the material, without implying responsibility for its final form.

of consultors in each panel could be limited, and made subject to a requirement of equitable geographical distribution. The arrangements for admission to the panels of consultors could be either:

(a) Nomination by Governments, intergovernmental organizations or non-governmental organizations in consultative status with ECOSOC. In this case, some arrangements would be needed to manage the numbers of nominees from each nominator;

(b) Self-nomination by suitably qualified experts subject to selection by the Group of Experts (and, if a management and review mechanism is established, and such a task is appropriate for its remit) approval by that mechanism); or

(c) A combination of these two methods.

13. The consultors would be given the initial drafts of working papers by the lead drafters, and allowed a period in which to comment on them. Lead drafters may also wish to consult them during the preparation of the initial drafts. Lead drafters would be expected to deal with comments from the consultors in their final versions of the working papers, and record how they have been treated. A similar process would be followed with draft chapters of the first integrated report. It is important to note that these processes would be separate from the peer review of the final draft of the first integrated assessment report. The difference is that the consultors would be making contributions to the material from which the Group of Experts of the Regular Process will produce the draft of the first integrated assessment report. The peer-reviewers will be examining the conclusions in that report critically.

14. To ensure a consistent approach to the drafting of documents, the Group of Experts would suggest developing guidance to lead drafters and other contributors. A first draft of such guidance is attached for information at Annex B. This draft also suggests including a summary of what is agreed by the Ad Hoc Working Group of the Whole on working methods. The Group of Experts would propose to develop this guidance further to take account of the views of States, existing assessment processes and comments resulting from the processes described in section IV below.

15. If the Ad Hoc Working Group of the Whole decides to set up a management and review mechanism, and if the functions of such a mechanism are appropriate for such issues, general issues to be agreed by the Group of Experts could be made subject to the approval of that mechanism, which might also be given authority to approve alterations in the agreed working methods if these prove to be necessary.

## III. Options for the questions to be answered by the first integrated assessment

16. In the Information Material that the Group of Experts established pursuant to resolution 64/71 submitted to the Ad Hoc Working Group of the Whole at its meeting in 2010, there were three options for organizing the framework of the first integrated assessment. These were based respectively on:

(a) Human activities affecting the marine environment;

(b) Habitats;

(c) Ecosystem services provided by the marine environment.

17. All relevant aspects of the marine environment could be covered by an analysis under any one of these three approaches. However, further consideration by the Group of Experts has suggested that various aspects of the world's marine environment will be better served by an analysis drawing on the strengths of all these three approaches rather than by an analysis under a single one.

18. The Group of Experts has therefore concluded that the best option will be to amalgamate the three different principles of organization. A draft outline of a first integrated assessment has been prepared on this basis and is attached at Annex C. The outline pays particular attention to the need to ensure that the first integrated assessment should cover all three aspects of sustainable development: economic, social and environmental. It therefore covers a number of issues which have not previously featured in marine assessments.

19. Within many of the chapters that are suggested, a number of headings have been identified. These are intended to give clear guidance on the issues that need to be covered in order to achieve a satisfactory assessment of environmental, economic and social aspects.

20. As with the draft guidance to authors, the Group of Experts does not suggest that this outline should be approved as it stands. It will benefit from a period of consultation with States and existing assessment processes, as proposed below in section IV. The Group of Experts could settle the final version in the light of the comments made in the processes described in section IV, engaging with States and existing assessment processes. If a management and review mechanism is established, and if the functions of such a mechanism are appropriate for such issues, the conclusions of the Group of Experts could be made subject to the approval of that mechanism.

21. The Group of Experts also suggests that lead drafters of working papers would need to agree to focus on these headings and on the chapter headings where no subdivision is suggested. In many cases, there could be a series of initial working papers each covering only a limited number of marine regions of the globe. The invitations to nominate experts could therefore emphasize that experts could accordingly confine themselves to the issues in respect of regions with which they are familiar. The draft chapters of the assessment can then be written on the basis of these regional working papers, or on the basis of an intermediate synthesis paper compiled from the regional working papers, if that is more appropriate.

## IV. Options on engaging with States and existing assessment processes

22. Since the commitment of the World Summit on Sustainable Development in 2002 to establish a regular process, the intention has been that the Regular Process should build upon existing regional assessments. The Assessment of Assessments phase[3] found that, in many cases,

[3] UNEP and IOC-UNESCO. (2009) An Assessment of Assessments, Findings of the Group of Experts pursuant to United Nations General Assembly resolution 60/30. Start-up phase of the Regular Process for Global Reporting and

an integrated assessment could be improved by supplementing regional assessments with national or thematic assessments. To make this as effective as possible, arrangements are needed to establish a two-way process: the Group of Experts at the global level needs to learn from the experts at regional and national levels; and experts at regional and national levels need to be able to understand the views of the Group of Experts of the Regular Process. This will enhance sharing of knowledge, expertise and lessons learned, and it will advance progress towards common data standards and guidelines, avoid duplication of effort, and improve compatibility of results.

23. At the meeting of the Ad Hoc Working Group of the Whole in 2010, the Group of Experts made some suggestions on the way in which networking could be built between the Regular Process and States and the existing assessment mechanisms (including a series of workshops). These suggestions build upon ideas set out in the Assessment of Assessments report, and are attached as Annex D, with modifications in the light of General Assembly resolution 65/37.

24. The Group of Experts has reviewed these suggestions, and believes that they still represent a satisfactory way forward, if buttressed by the communications arrangements suggested in section VI below.

## V. Options for data handling

25. To ensure the credibility and legitimacy of the first integrated assessment, it will be essential for users of the assessment to be able to relate its conclusions to the supporting data and information.

26. The essential foundation for this requirement will be ensured by the guidance to authors, which will have to emphasize the need for the working papers to identify clearly the data or information on which they are based, and to ask authors to provide the means for all interested to access that data or information.

27. However, to enable the users of the first integrated assessment to satisfy themselves that the underlying data or information does support the conclusions, it will be necessary to provide a relatively straightforward method to access that data or information. The possibilities for this include:

(a) The Global and Regional Assessments of the Marine Environment Database (GRAMED)[4], maintained by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP/WCMC), was used during the Assessment of Assessments phase. It proved a valuable means of holding metadata on marine assessments. It would be valuable if this database could be continued and extended to cover all assessments referenced in the first integrated assessment, possibly together with metadata on other data and information used;

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Assessment of the State of the Marine Environment including Socio-economic aspects. UNEP and IOC/UNESCO, Progress Press, Malta. Available at http://www.unga-regular-process.org/.

[4] Available at http://www.unep-wcmc.org/GRAMED/.

(b) In the context of the work of the Commission on the Limits of the Continental Shelf, the GRID/Arendal Collaborating Centre of the United Nations Environment Programme[5] has produced very successful methods of enabling access to data held in a variety of databases without the creation of a new database;

(c) The International Oceanographic Data and Information (IODE)[6] programme of UNESCO's Intergovernmental Oceanographic Commission (IOC) is the hub of an extensive network of organizations managing marine and oceanographic data, which is available to support global or regional assessments.

28. It will be useful, therefore, to explore whether such methods can be developed – by WCMC, GRID/Arendal, IOC/IODE or others – to support ready access to the data and information used to prepare the working papers upon which the final assessment will be based. This aspect is already covered by the agenda suggested for the series of workshops suggested in section IV above. However, it will help to start discussions on this issue before the series of workshops is completed. Relevant institutions will be more ready to start such discussions if the Ad Hoc Working Group of the Whole can confirm that this is an important part of the Regular Process.

## VI. Options for a communications strategy

29. The report on the assessment of assessments (A/64/88, annex) stressed the importance of an effective communications strategy in ensuring that any assessment is well produced, achieves credibility, relevance and legitimacy, and is informative for each identified target audience. It is thus important to consider from an early point how communications should be organized. There are seven main audiences for the Regular Process, bearing in mind that States are the primary target audience of the Regular Process as recommended by the Ad Hoc Working Group of the Whole at its meeting in 2010:

(a) The Governments of United Nations Member States;

(b) Relevant United Nations specialized agencies and programmes, and other relevant global intergovernmental organizations;

(c) Regional intergovernmental organizations concerned with marine issues;

(d) Non-governmental organizations in consultative status with ECOSOC;

(e) Relevant scientific institutions and major groups identified in Agenda 21 who may ask to participate in the Ad Hoc Working Group of the Whole;

[5] See http://www.continentalshelf.org/.

[6] See http://www.iode.org/.

(f) Experts in the relevant environmental, economic and social sciences, including those in the private sector;

(g) Civil society at national and local levels, and the general public with an interest in these issues.

30. It is essential that the Regular Process should be transparent to all these audiences. The following steps could be taken to ensure such transparency:

(a) as recommended in the report on the assessment of assessments, the first four target audiences (Governments, global and regional intergovernmental organizations and non-governmental organizations in consultative status with ECOSOC) could each be invited to nominate a focal point, with whom the Group of Experts and the Secretariat could communicate. These focal points would have two key tasks: ensuring that timely information from the Group of Experts and the Secretariat is communicated to the relevant people within their organizations; being responsible for relaying to the Group of Experts and the Secretariat queries and uncertainties raised by their staff and constituencies;

(b) As also recommended in the report on the assessment of assessments, the entities referred to in paragraph 29(e), could also be invited to nominate a correspondent, who would receive updatings from the Group of Experts and the Secretariat;

(c) A website could be established from which all target audiences could obtain documents produced as part of the Regular Process and information on its progress. There is already a page on the website of the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations (http://www.un.org/Depts/los/global_reporting/global_reporting.htm). A website, managed by the United Nations Environment Programme, was also established for the Assessment of Assessments phase (http://www.unga-regular-process.org). It may be possible to develop one or both of these sites to include necessary information on the implementation of the Regular Process. Such development might include the possibility of automatic notifications, upon request, when new documents are posted;

(d) The panels of consultors described above in paragraphs 12 and 13 would form a channel of communication to experts in the relevant sciences, since they would be following the aspects of the Regular Process relevant to their specialism, and would be active in their field;

(e) The Regular Process could establish a presence on appropriate social networks (such as Facebook and Twitter) on which progress bulletins could be posted. This could serve all target audiences.

31. In the longer term, it will be necessary to consider how to make the first integrated assessment public. In modern circumstances, one means should be the use of the internet. It could, however, also be desirable to explore publication in book format, as has been done, for example, by the International Panel on Climate Change (IPCC). It could be useful to explore

such a possibility at an early stage, to ensure that any design requirements can be established from the start, and do not have to be incorporated at a late stage.

32. As part of the communications strategy, it is necessary to consider the languages in which material should be produced and made available. For maximum effect, it will be essential that Part I (summary for decision makers) of the first integrated assessment report is produced in all official languages of the United Nations. However, the rest of the report, and the associated working papers, will be very substantial. There is also the question of the progress reports and other material referred to above. Translation of the whole of this material would be very expensive and probably beyond the resources available in the Trust Fund established pursuant to paragraph183 of resolution 64/71. The conclusion therefore seems to be that the working languages for the first integrated assessment will have to be English and French as the two working languages of the United Nations (with the translation of any inputs in French into English, since that is the only common language of the Group of Experts). Nevertheless, there is a strong case for lead drafters to be able to work in any of the official languages of the United Nations, with their drafts being translated into English by the Regular Process, since otherwise the choice of lead drafters could be unreasonably restricted and it could be more difficult to achieve an equitable geographical distribution. If resources can be mobilised for this purpose, it could be appropriate to provide for this facility.

## VII. Options for the timetable

33. Keeping in mind the date of 2014 as the completion year of the first integrated assessment specified by the General Assembly, the Group of Experts would suggest that the first integrated assessment report be made available to States prior to the negotiations on the General Assembly resolutions on oceans and the law of the sea and on sustainable fisheries to be adopted at its sixty-ninth session. The first integrated assessment would thus also be ready before the next review of oceans by the Commission on Sustainable Development in 2015. This would imply that a target date such as 1 September 2014 could be set for delivery of the final product. This implies that the work of the first integrated assessment would have to be completed by 31 May 2014, in order to allow for translation and publication.

34. A draft timetable to deliver the first integrated assessment by such a target date is attached as Annex E.

# ANNEX A

## Elements of the overall framework of the regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects

1. The presentation of the options in this Set of Options is based on the outcome of the 2009 meeting of the Ad Hoc Working Group of the Whole to recommend a course of action to the General Assembly on the Regular Process (A/64/347, annex).

2. General Assembly resolution 64/71 of 4 December 2009 later endorsed the recommendations of the Ad Hoc Working Group of the Whole proposing a framework for the Regular Process. In paragraph 201 of resolution 65/37 of 7 December 2010, the General Assembly reaffirmed the principles guiding the Regular Process and the objective and scope of its first cycle (2010-2014) as agreed upon at the first meeting of the Ad Hoc Working Group of the Whole in 2009.

3. The recommendations of the Ad Hoc Working Group of the Whole thus endorsed by the General Assembly outlined in the following paragraphs are relevant to the Set of Options presented in this document.

4. The framework for the Regular Process consists of:

(a) The overall objective for the Regular Process;

(b) A description of the scope of the Regular Process;

(c) A set of principles to guide its establishment and operation; and

(d) The best practices on key design features for the Regular Process as identified by the Group of Experts.

5. Capacity-building, sharing of data, information and transfer of technology are essential for the implementation of the Regular Process and crucial elements of its framework.

### Overall objective

6. The Regular Process under the United Nations is recognized as the global mechanism for reviewing the state of the marine environment, including socio-economic aspects, on a continual and systematic basis by providing regular assessments at the global and supra-regional levels and an integrated view of environmental, economic and social aspects. Such assessments will support informed decision-making and thus contribute to managing in a sustainable manner human activities that affect the oceans and seas, in accordance with international law, including the United Nations Convention on the Law of the Sea and other applicable international instruments and initiatives.

7. The Regular Process facilitates the identification of trends and enables appropriate responses by States and competent regional and international organizations.

8. The Regular Process promotes and facilitates, including through its established Trust Fund and scholarship fund, the full participation of developing countries in all of its activities.

9. Ecosystem approaches are recognized as a useful framework for conducting fully integrated assessments.

**Capacity-building and technology transfer**

10. The Regular Process promotes, facilitates and ensures capacity-building and transfer of technology, including marine technology, in accordance with international law, including the United Nations Convention on the Law of the Sea and other applicable international instruments and initiatives, for developing and other States, taking into account the Criteria and Guidelines on the Transfer of Marine Technology of the Intergovernmental Oceanographic Commission.

11. The Regular Process promotes technical cooperation, including South-South cooperation.

12. States and global and regional organizations are invited to cooperate with each other to identify gaps and shared priorities as a basis for developing a coherent programme to support capacity-building in marine monitoring and assessment.

13. The value of large-scale and comprehensive assessments, notably in the Global Environment Facility's international waters large-marine ecosystems initiatives, in identifying and concentrating on capacity-building priorities is recognized.

14. Opportunities for capacity-building will be identified, in particular on the basis of existing capacity-building arrangements and the identified capacity-building priorities, needs and requests of developing countries.

15. States and relevant international organizations, bodies and institutions are invited to cooperate in building the capacity of developing countries in marine science, monitoring and assessment, including through workshops, training programmes and materials, and fellowships.

16. Quality assurance procedures and guidance are developed to assist Governments and international organizations to improve the quality and comparability of data.

**Scope**

17. The scope of the Regular Process is global and supra-regional, encompassing the state of the marine environment, including socio-economic aspects, both current and foreseeable.

18. In the first cycle, the scope of the Regular Process will focus on establishing a baseline. In subsequent cycles, the scope of the Regular Process will extend to evaluating trends.

19. The scope of individual assessments under the Regular Process will be identified by Member States in terms of, inter alia, geographic coverage, an appropriate analytical framework,

considerations of sustainability, issues of vulnerability and future scenarios that may have implications for policymakers.

**Principles**

20. The Regular Process is guided by international law, including the United Nations Convention on the Law of the Sea and other applicable international instruments and initiatives, and will include reference to the following principles:

(a) Viewing the oceans as part of the whole Earth system;

(b) Regular evaluation by Member States of assessment products and the Regular Process itself to support adaptive management;

(c) Use of sound science and the promotion of scientific excellence;

(d) Regular analysis to ensure that emerging issues, significant changes and gaps in knowledge are detected at an early stage;

(e) Continual improvement in scientific and assessment capacity, including the promotion and development of capacity-building activities and transfer of technology;

(f) Effective links with policymakers and other users;

(g) Inclusiveness with respect to communication and engagement with all stakeholders through appropriate means for their participation, including appropriate representation and regional balance at all levels;

(h) Recognition and utilization of traditional and indigenous knowledge and principles;

(i) Transparency and accountability for the Regular Process and its products;

(j) Exchange of information at all levels;

(k) Effective links with, and building on, existing assessment processes, in particular at the regional and national levels; and

(l) Adherence to equitable geographical representation in all activities of the Regular Process.

**The first cycle of the Regular Process**

21. In order to support adaptive management, the Regular Process will be implemented through a succession of cycles. A first cycle of the Regular Process will cover five years, from 2010 to 2014, coinciding with the next review by the Commission on Sustainable Development of the theme “Oceans and seas”, bearing in mind that the thematic cluster for 2014/2015 will remain as part of the multi-year programme of work (E/2003/29-E/CN.17/2003/6) as scheduled, unless otherwise agreed by the Commission.

22. The first phase of the first cycle, covering the years from 2010 to 2012, will be devoted to the development of the strategy and timetable for the production of an integrated assessment of the world's oceans and seas, taking into consideration the scope, guiding principles and best practice guidance on key design features for the Regular Process proposed by the Group of Experts, as well as the promotion and development of capacity-building activities and transfer of technology.

23. The second phase of the first cycle, covering the years 2013 and 2014, will produce an integrated assessment of the oceans, including agreed priority cross-cutting thematic issues such as food security, and establish a baseline for future global assessments. This will provide the scientific basis for the identification of appropriate baselines and internationally agreed environmental standards for use in assessments of the state of the marine environment (including guidelines for their development, where required) and suitable programmes to monitor and report on the effects of human activities on the marine environment.

## ANNEX B

### Draft Guidance for Contributors

### I. Background

1. This annex sets out the working arrangements and guidance for those preparing, and contributing to, the first integrated assessment under the Regular Process. It is intended to guide:

(a) Members of the Group of Experts established pursuant to General Assembly resolution 65/37, who may have one or more of the following roles:
   (i) The Group of Experts will collectively be responsible for preparing the first integrated assessment,
   (ii) Some members of the Group of Experts will also be the lead drafters of some working papers and some draft chapters,
   (iii) Some members of the Group of Experts will act as editors of draft chapters in the light of comments received during the peer-review process;

(b) Other lead drafters of working papers and draft chapters. These drafters may be either individual lead drafters or a group of drafters acting as a collective lead drafter, together with other contributors where appropriate;

(c) Existing assessment organizations that agree to undertake the functions of lead drafter for issues within their competence;

(d) Other editors of draft chapters in the light of comments during the peer-review process;

(e) Consultors who are invited to comment on working papers and draft chapters; and

(f) Peer-reviewers who are invited to review the draft chapters before their final approval.

2. Members of all these groups are referred to collectively as “authors”. It is envisaged that the names of all those who contribute in any of these roles will be acknowledged in the first integrated assessment report. Appropriate acknowledgement will also be made to those who participate in the suggested regional workshops, if these are agreed upon.

3. When contributing to the preparation of the report, it is expected that authors in this broad sense will act in their personal capacity as independent experts, and not as representatives of a Government or any other authority or organization. They should neither seek nor accept instructions regarding their work for the Regular Process, although they are free to consult widely with other experts and with government officials, in order to ensure that their contributions are credible, legitimate and relevant. Authors are also expected to disclose to the Secretariat of the Regular Process any conflicts of interest, or the possibility of the perceptions of conflicts of interest, before they accept appointment (and, after appointment, when any potential conflict may arise).

4. The working arrangements for the Group of Experts and for organizing the participation of authors, editors and peer-reviewers are set out in the arrangements for the Regular Process approved by the Ad Hoc Working Group of the Whole of the General Assembly at its meeting in February 2011. In broad terms, they provide that the Group of Experts will:

[(a) Decide how much of the work they could do themselves, and, in the light of that, select other experts to carry out the remaining work from among those nominated by States, intergovernmental organizations and non-governmental organizations in consultative status with ECOSOC;

(b) Where appropriate, agree with existing assessment organizations[7] for them to carry out the tasks of lead drafters of working papers for specified issues in the areas where they have competence, either by providing relevant material that is already available, or by organizing the production of new material;

(c) For other issues where working papers are needed, agree with selected lead drafters (including, where appropriate, groups of drafters) to:
   (i) Provide draft working papers of an agreed length, covering a specified issue (or the regional aspect of a specified issue), by the date specified in an agreed timetable, and
   (ii) Revise such working papers in the light of comments received under the process described in paragraphs 12 and 13 below, again by the date specified in an agreed timetable;

(d) Review the material emerging from these activities to ensure that the necessary material is forthcoming, and take any further steps necessary to fill gaps or resolve contradictions;

(e) Agree, at the appropriate time, with selected lead drafters (including, where appropriate, groups of drafters) or existing assessment organizations for them to:
   (i) Draft, on the basis of the working papers, draft chapters of the first integrated assessment by the date specified in an agreed timetable, and
   (ii) Revise such draft chapters in the light of comments received under the process described in paragraphs 12 and 13 below, again by the date specified in an agreed timetable;

(f) Review the draft chapters and, on the basis of them, prepare a draft of the first integrated assessment;

[7] These include organizations managing programmes for Large Marine Ecosystems, regional organizations under the Global Ocean Observation System (GOOS), regional fisheries organizations and arrangements and regional seas organizations.

(g) Arrange for the peer review of that first draft, and for its review by experts from States and intergovernmental organizations, and for the revision of the draft in the light of the outcome of those reviews;

(h) Agree upon the final text of the first initial assessment for presentation to the Ad Hoc Working Group of the Whole.

5. In all these tasks, the Group of Experts would have to ensure that the lead drafters and other contributors have adequate qualifications and represent an equitable geographic distribution.][8]

## II. Context of the Regular Process

6. Authors will normally have an expertise that applies to a particular aspect of the Regular Process, but they should nevertheless familiarize themselves with the broad context of the Regular Process. As a minimum, they should be aware of the contents of:

(a) Chapters 1 to 4 of the Assessment of Assessments report;[9]

(b) Other background material prepared by the Group of Experts of the Regular Process to accompany invitations to serve as authors.

7. In addition, the review by a committee working under the InterAcademy Council[10] of the processes and procedures of the Intergovernmental Panel on Climate Change (IPCC) contains useful background to issues that arise in preparing assessments on a global scale.

## III. Editorial procedures

8. The Regular Process will need to rely heavily upon experts external to the Group of Experts of the Regular Process to:

(a) Identify existing assessments which can be used as a basis for the first integrated assessment;

(b) Write working papers on other specific aspects of the marine environment;

(c) Draft chapters of the first integrated assessment;

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[8] The passage in square brackets repeats the suggestions of the Group of Experts in the Set of Options. It would be amended to reflect the outcome of the meeting of the Ad Hoc Working Group of the Whole in February 2011.

[9] UNEP and IOC-UNESCO. (2009) An Assessment of Assessments, Findings of the Group of Experts Pursuant to United Nations General Assembly resolution 60/30. Start-up phase of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic aspects. UNEP and IOC/UNESCO, Progress Press, Malta. Available at: http://www.unga-regular-process.org.

[10] Shapiro, H. T. et al. (2010) Climate Change Assessments: Review of the Processes and Procedures of the IPCC. Report of the Committee to Review the Intergovernmental Panel on Climate Change. InterAcademy Council, Alkmaar, The Netherlands. Available at http://reviewipcc.interacademycouncil.net/report.html.

(d) Revise those chapters in the light of comments from consultors;

(e) Peer-review the revised draft chapters; and

(f) Edit the draft chapters in the light of peer-review comments and comments from States and intergovernmental organizations.

9. The timetable for these various stages will be [agreed under arrangements made by the Ad Hoc Working Group of the Whole][11].

## IV. Identifying existing assessments

10. The Assessment of Assessments report[9] showed the scale of the existing activity in assessing the state of the marine environment. The assessments considered in that exercise are identified in the Global and Regional Assessments of the Marine Environment Database (GRAMED) maintained by the World Conservation Monitoring Centre of the United Nations Environment Programme (http://www.unep-wcmc.org/gramed). It is expected that authors will take the relevant parts of all these assessments into account in preparing material for the first integrated assessment. Where one of these assessments has been overtaken by a more recent assessment, it is expected that authors will arrange, through the Secretariat of the Regular Process, for the GRAMED entry to be updated accordingly.

11. There will also be other assessments that have not yet been entered into the GRAMED, but which will be relevant to one or more of the issues identified in the outline for the first integrated assessment. Experts are invited to notify such assessments to the Secretariat of the Regular Process for inclusion in GRAMED. Such notification is particularly important where the assessment is sufficiently comprehensive to be usable directly as a basis for a draft chapter, thus avoiding the writing of a special working paper on the issue. This applies also where the assessment is at a regional level, since such an assessment may serve in place of a working paper in relation to that region.

12. The aim is to ensure that a single portal, such as GRAMED, will enable those interested to identify the information on which the first integrated assessment is based, and help them to access it.

## V. Working papers and draft chapters

13. For each working paper and chapter that is identified in the final version of the outline of the first integrated report, a lead drafter will be appointed under the arrangements approved by the Ad Hoc Working Group of the Whole. Such a lead drafter may be either:

[11] The passage in square brackets would be amended to reflect the outcome of the meeting of the Ad Hoc Working Group of the Whole in February 2011.

(a) An individual lead drafter;

(b) A group of drafters acting collectively as lead drafter;

(c) An existing assessment organization.

14. In many cases, lead drafters will want, or need, to invite other specialists to contribute to the working paper or draft chapter. They will be able to do so, provided that:

(a) Experts from around the world contribute to the first integrated report;

(b) Any advice issued by the Group of Experts of the Regular Process on the choice of contributors is followed; and

(c) The names and details of those who are invited to contribute are reported to the Secretariat of the Regular Process, so that the Group of Experts can check that the overall selection of experts remains appropriate.

15. In addition to any contributors invited by the lead drafters, there will be panels of consultors for issues or groups of issues who will be consulted on draft working papers or draft chapters. Lead drafters will be asked to consider comments from the consultors, to make appropriate amendments to take account of them, and to record how they have dealt with the comments.

### A. Working papers

16. Working papers will be needed for those issues, or parts of issues, which are not completely covered by existing assessments that have been identified as satisfactorily covering the issue, either on their own or in combination. The lead drafter will be expected to prepare a draft in accordance with the agreed timetable.

17. When a satisfactory first draft of a working paper has been written, it should be made available for comment by the consultors appointed under the agreed arrangements. Comments made by the consultors, by the deadline set under the agreed timetable, should be considered by the lead drafter, and appropriate revisions should be made. There may need to be iterations of this process, consistent with the approved timetable for the completion of working papers. The Group of Experts will follow the exchanges between the drafters of working papers and the consultors, to ensure that the process flows efficiently and produces working papers appropriate for the needs of the Regular Process. The completed working paper should be submitted to the Secretariat of the Regular Process.

### B. Draft chapters

18. A similar process of initial draft by lead drafters, comment by consultors and revision of the initial draft will be followed in the preparation of the draft chapters. These will also need to be prepared in accordance with the agreed timetable. The draft chapters will need to be clear and concise statements of the main issues and conclusions relevant to the theme of the chapter. Draft

chapters should normally not exceed [5,000][12] words. In particular, draft chapters in the "Context" section of the outline should aim to set out only sufficient information to enable the non-expert reader to understand the main sections of the assessment: these could be shorter than [5,000] words.

19. At this stage, it will be important to take account of the interrelationships between the various themes. The aim should be both to ensure that content is not duplicated or contradictory and to identify significant cross-cutting issues. The Group of Experts of the Regular Process will be considering possible interrelationships, and will aim to draw the attention of lead drafters to them. In the case of such interrelationships, the lead drafters need to communicate with each other to ensure that they have captured correctly (and not contradicted) the content of related chapters.

20. In the light of their consideration of the existing assessments identified as relevant and the working papers, the Group of Experts of the Regular Process may issue guidance on the drafting of the draft chapters, in order to ensure, for example, that:

(a) Important interrelationships are covered in one chapter rather than another;

(b) Different draft chapters are coherent one with another; and

(c) Specific issues are dealt with.

### C. Information

21. The aim will be to enable all readers to access the information on which the first integrated report is based so that its conclusions can be checked. Authors should therefore, in general, base their working papers and draft chapters on publicly available information. Nevertheless, where significant information is not yet publicly available, authors are free to use it, but should take such steps as are possible to enable the information to be accessed by those who are interested. If practicable, such steps should include making it available to those who peer-review the chapter, and depositing a copy of the information (or the means of accessing it on the internet) with the Secretariat of the Regular Process, to be made available on request when the first integrated assessment report is presented. Where this is not practicable, the problem should be drawn to the attention of the Group of Experts of the Regular Process, so that they can consider how the matter should be treated.

22. Where a draft chapter draws on a working paper produced for the Regular Process, it will be sufficient to refer to the working paper without giving further references: readers can be expected to go to the working paper if they require more detail on the information used.

23. It is acknowledged that, in some instances, working papers and draft chapters will not rely on peer-reviewed literature, although the citation of peer-reviewed information is to be preferred

[12] The size limit for chapters requires further consideration.

where it is available. Although not perfect, the peer-review process ensures that the study being considered has had the benefit of independent scrutiny and quality control before it is used in the assessment. The Regular Process may accept the use of non-peer-reviewed sources. However, all contributors are responsible for critically assessing them, and reviewing their quality and validity before incorporating them into the working paper or draft chapter. Where a publication is referred to, but is neither peer-reviewed nor an official statistical publication, it should be identified as such, so that the Group of Experts of the Regular Process can consider whether its use would adversely affect the quality of the first integrated assessment report. The objectives are to ensure that all information used by the Regular Process receives critical evaluation, that its use is open and transparent, and that all references used in the reports are, as far as possible, easily accessible.

**VI. World and regions**

24. The prime audiences for the first integrated assessment report are the policy makers at the national, regional and global levels. The focus of both working papers and draft chapters must therefore be to provide an assessment which will be useful to these policy makers. The aim is not to second-guess regional assessments, but to put regional problems and challenges into context – showing which are common to many or most regions, and which are of particular importance to a few regions or just one region. The first integrated assessment is to be built up on the basis of existing regional assessments. It will therefore be important for lead drafters to strike the right balance between aggregating material to the global level and giving detail about what is happening at the regional and national levels. The final assessment must give a balanced view of the world's oceans as a whole, and not focus on regions where there happens to be a lot of information.

25. Working papers may concentrate on one area of the world (in which case they will probably form part of a series which, taken together, will cover the world) or cover all the different parts of the world's oceans and seas. The working papers may therefore need to contain much information. The draft chapters, however, must be clear and concise. It will therefore help if working papers are written so as to help the drafters of the draft chapters achieve these aims. Maps, tables and charts will often allow a lot of information about different regions or aspects to be presented concisely, with the text highlighting the most significant points, rather than discussing every region or aspect in turn.

**VI. The draft first integrated assessment report and the peer-review process**

26. The Group of Experts of the Regular Process will prepare a draft of the first integrated assessment report on the basis of the draft chapters emerging from the processes described above.

27. The draft of the first integrated assessment report will be subject to a peer-review process. The experience of the IPCC reports indicates that this process will need to be carefully managed: the Fourth IPCC Report involved more than 1,300 authors and 2,000 reviewers, and more than 90,000 comments were received on some papers.[10]

28. The peer-review process of the first integrated assessment will involve two aspects, which may overlap:

(a) The draft of the first integrated assessment as a whole will be sent to the focal point of each United Nations Member State and of each relevant intergovernmental organization, so that they can organize its consideration by their experts. The focal point will be asked to consolidate the comments of their experts in order to ensure that comments come from recognized experts and to simplify the task of bringing them together;

(b) The draft of each chapter of the first integrated assessment will also be sent to a number of expert peer-reviewers appointed [under arrangements approved by the Ad Hoc Working Group of the Whole][13]. The peer-reviewers will be persons who have not been involved in writing the draft chapter that they are asked to review.

29. The Group of Experts of the Regular Process will designate two, or more, editors for each chapter, either from among their own members or, if necessary, from outside. If it is necessary to appoint editors from outside the Group of Experts, their appointments will be approved [under arrangements approved by the Ad Hoc Working Group of the Whole][14]. The editors will preferably be drawn from among the authors who have contributed to the chapter. It will be the responsibility of the editors to consider comments from the national experts and the peer-reviewers and, where appropriate, to adjust the draft chapter accordingly, in consultation with the lead drafter, for presentation to the Group of Experts of the Regular Process as a whole. If the lead drafter has reservations on the final text, these will be recorded. The Group of Experts of the Regular Process will then agree on the final version of the first integrated assessment for presentation to the Ad Hoc Working Group of the Whole (through the management and review mechanism, if established and if its remit makes this appropriate) for submission to the General Assembly.

## VII. Characterizing and communicating uncertainty

30. Some of the conclusions of the Regular Process may be controversial. As such, they will be subject to intense scrutiny by stakeholders. However, all parts of the report must be as accurate as possible since an error in any part can undermine the credibility of the entire report. To this end, authors must exercise caution and discipline in describing the uncertainty associated with any statements made in their chapters.

31. Uncertainty is characterized and communicated by describing how much is known about a topic (i.e., the quality and nature of the evidence available), and the probability that a particular event will occur. Each conclusion of the first integrated assessment will need to be accompanied by a judgement of its uncertainty. There are several different ways to express uncertainty:

[13] The passage in square brackets would be amended in the light of the outcome of the Ad Hoc Working Group of the Whole in February 2011.

[14] The passage in square brackets would be amended in the light of the outcome of the Ad Hoc Working Group of the Whole in February 2011.

(a) Likelihood (e.g., “extremely likely” might indicate a greater-than-95 percent probability that a particular event will occur);

(b) Confidence (e.g., “high confidence” might indicate an 8 out of 10 chance of being correct);

(c) Level-of-understanding (described in terms of the amount of evidence available and the degree of agreement among experts);

32. The level-of-understanding scale is a convenient way of communicating the nature, number, and quality of studies on a particular topic, as well as the level of agreement among studies. This scale can be supplemented by quantitative likelihood or confidence measures, if such are deemed to be needed and appropriate.[10]

33. Authors should avoid reporting conclusions with high levels of confidence for which there is little evidence, and should always seek clarity when making definitive statements. All conclusions should withstand scrutiny and be supported sufficiently by the available information cited in the report. To this end, authors should use standard terms to qualify the level of confidence and risk. The Group of Experts of the Regular Process will agree a glossary of such standard terms.

34. Authors are encouraged to make statements about the likelihood of an outcome or event as explicit as possible, but must ensure that the methods that they use for estimating or otherwise evaluating probabilities or likelihood (expert judgement, analysis of data, modelling) are appropriate to the quantity, quality and nature of the information available.

## VII. Risk

35. All assessments and reporting undertaken by the Regular Process will have to be prepared in ways that evaluate the risks, and will have to be communicated in the context of those risks. “Risk” can be formally defined as the product of the likelihood of an event and the seriousness of the event if it were to occur. In all assessments, when a risk is being described, both the likelihood and the potential severity of each consequence should be made as clear as possible.

36. There are two ways that “risk” can enter into decision-making. One is the “risk” that some pressure, either a natural event or a human activity, will have some undesirable consequence if it is not managed or mitigated effectively. The other is the “risk” that a policy option intended to manage or mitigate possible undesirable impacts of a pressure could have its own undesirable impacts on some other ecosystem feature or benefit. Assessments by the Regular Process should always consider both of these aspects of “risk” associated with selecting and implementing policies.

37. The details of how this will be done should be case-specific, as there are many tools for quantifying and communicating risk. The selection of the appropriate method of reporting risk depends on the quantity and quality of data and information that is available.

38. Given that the Regular Process will conduct assessments that integrate information on diverse pressures and ecosystem properties globally and supra-regionally, it is expected that each assessment will have to accommodate a wide range in data quality and quantity, and in knowledge of relationships and impacts. Hence there will be no single best approach to risk quantification and communication.[15]

## IX. Handling the full range of views

39. An assessment is intended to arrive at a judgment of a topic. Although all reasonable points of view should be considered, they need not be given equal weight or even described fully in a working paper or draft chapter. What alternative viewpoints warrant mention is a matter of professional judgment. Therefore, lead drafters have considerable influence over which viewpoints will be discussed in the process.

40. Involving authors with diverse viewpoints is the first step toward ensuring that a full range of views are considered. Equally important is combating "confirmation bias", that is, the tendency of authors to place too much weight on their own views relative to other views. Lead drafters should explicitly document that a range of scientific viewpoints has been considered, and editors should satisfy themselves that due consideration was given to properly documented alternative views.

## X. Ethics in authoring and evaluating material for the Regular Process

41. It is expected that authors will follow established protocols for ethics in scientific reporting. In particular, authors are responsible for:

(a) Correctly citing the published work of others;

(b) Accurately representing the conclusions of cited work; and

(c) Disclosing any conflict of interest.

42. The first integrated assessment will be based primarily upon existing assessments, which are themselves a synthesis of existing information relative to a particular geographic area. It is important that information cited in the first integrated assessment report can be traced back to its original source (see also the section above on information). The credit for the production of synthesis products (maps, graphs, etc.) should be accurately attributed to the original authors.

43. By its very nature, the Regular Process requires authors to review and synthesize numerous large bodies of work, and to distil out the salient points of numerous regional studies into consolidated global statements. Throughout this process, it is important that the synthesis

[15] See also: Group of Experts (2010). Information material from the Group of Experts established pursuant to paragraph 180 of General Assembly resolution 64/71 provided to the Ad Hoc Working Group of the Whole, September 2010. Available at: http://www.un.org/Depts/los/global_reporting/global_reporting.htm.

produced does not lose or misrepresent the essential conclusions, meaning and intent of the original works. Authors are responsible for ensuring that such misrepresentation does not occur.

44. The nature of the Regular Process (i.e., presenting a series of expert judgments on issues of great societal relevance) demands that it pay special attention to issues of independence and bias to maintain the integrity of, and public confidence in, its results.

## ANNEX C

### Possible outline for a global integrated assessment of the state of the marine environment, including socio-economic aspects

*Note: Where there is a reference to consideration of policies on a topic, the intention (as shown in the Information Material provided to the 2010 meeting of the Ad Hoc Working Group of the Whole) is that the following questions would be considered:*

*(1) What are the policies and how effective are they?*
*(2) Where there is widespread success, what is causing failures in the other cases?*
*(3) Where there is not widespread success, what leads to this lack of success?*
*(4) Can improved implementation of existing policies address these problems?*
*(5) Are there policy gaps and if so, what type of new policies could be considered?*
*(6) What would be the environmental, social and economic consequences of improved implementation and/or new policies?*
*(7) Do data and/or knowledge gaps limit the ability to address the problems identified?*
*(8) What capacity-building measures are needed to overcome problems of policy development, policy implementation, data collection and knowledge acquisition?*

## Part I – Summary for decision makers

*[This Part would not follow the pattern of the main report, but highlight the most significant conclusions. It would aim to bring out:*

- *(a) Overall assessment of the scale of human impact on the oceans;*
- *(b) The main threats to the marine environment and human economic and social wellbeing;*
- *(c) The needs for capacity-building and possible ways of filling them;*
- *(d) The most serious gaps in knowledge and possible ways of filling them; and*
- *(e) The factors relating to possible remedial actions that could be relevant in establishing priorities.]*

## Part II – The oceans and their context

*Chapter 1. The major features of the ocean basins and linked seas*

1.A. The main geological features: enclosed and semi-enclosed seas – continental shelves and slopes – mid-ocean ridges – seamounts – coral and other biogenic reefs – sedimentation – major estuaries – fjord and ria areas – ocean canyons – coastal geological structures, beaches, marine wetlands, mangroves and tidal flats.
*[Under this heading, the aim would not be to provide an encyclopaedic description, but to give enough information to enable non-expert readers understand the subsequent discussion]*

1.B. The main features of the water column (including regional variability): bodies of water – thermohaline circulation – the main ocean currents – deep water formation (downwelling) and upwelling – stratification – ice coverage.
*[The material under this heading would simply aim to give the oceanographic background – the main issues would be covered in Chapters 5 and 6]*

**Chapter 2. Human relationships to the oceans**

2.A. Human population in coastal areas, including major cities in coastal areas and forecast changes.
*[The material under this heading would aim to draw on the work done for the United Nations World Population Project]*

2.B. Human impact on coastal areas: the extent to which human activities create pressures on coastal and marine ecosystems.
*[Material that could be relevant could include the scale of coastal agriculture, and industrial and urban development, and the proportion of coastline with urban development]*.

**Chapter 3. Rights and obligations in the oceans**

*[This chapter would give an overview of the different maritime zones and the different rights and obligations that exist in them. The aim would not be to set out an exhaustive description, but provide sufficient background for a non-expert to understand what jurisdictions exist and what controls can be applied.]*

**Chapter 4. Mandate, information sources and method of work**

4.A. Objectives, scope and mandate of the Regular Process.

4.B. General issues relating to the collection of environmental, economic and social data relating to the oceans and seas, including national, regional and global aggregation and analysis of information and data, quality assurance of data, and access to information.

4.C. Description of the way in which the first integrated assessment has been carried out.

## Part III – Assessment of major ecosystem services from the marine environment (other than provisioning services)[16]

**Chapter 5. The oceans' role in the hydrological cycle**

5.A. The interactions between the seawater and freshwater segments of the hydrological cycle: the rate of turnover and changes in it – freshwater fluxes – reduction in ice coverage – sea level changes.

[16] The main provisioning service from the oceans is food, which is covered in Part IV (food security). Other provisioning services are covered in Part V (other human activities impacting on the marine environment).

5.B. Environmental, economic and social implications of sea-level change.

5.C. Chemical composition of seawater: salinity and nutrient content of the different water bodies – changes in salinity and nutrient content – implications of such changes.

5.D. The oceans' role in heat transportation: the overall influence of the oceans on surface temperature – oceanic oscillations – El Niño and similar events.

5.E. Environmental, economic and social impacts of El Niño and similar events.

**Chapter 6. Sea/air interaction**

*[This chapter would draw heavily on the work of Intergovernmental Panel on Climate Change]*

6.A. Air quality regulation (oxygen production, carbon dioxide sequestration): role of the oceans and seas as carbon-dioxide sinks – issues about maintaining or enhancing that role.

6.B. Meteorological phenomena related to the oceans: hurricanes and typhoons – monsoon rains – trade winds.

6.C. Environmental, economic and social implications of trends in meteorological phenomena (including effects on seas covered by ice for much of the year).

6.D. Ocean acidification: degree and extent of ocean acidification.

6.E. Environmental, economic and social implications of trends in ocean acidification (with cross-reference to Part IV on Food Security).

**Chapter 7. Primary production, cycling of nutrients, surface layer and plankton**

7.A. Global distribution of primary production: the reasons for the present distribution – factors affecting cycling of nutrients and the variability and resilience of the base of the food web – changes known and foreseen (including changes in ultra-violet radiation from ozone-layer problems).

7.B. Surface layer and plankton: role of the surface layer – factors influencing it – variations in plankton species.

7.C. Environmental, economic and social implications of trends in primary production and other factors affecting the inherent variability and resilience of the base of the food web (with cross-reference to Part IV on Food Security).

**Chapter 8. Aesthetic, religious and spiritual ecosystem services derived from the marine environment**

Scale of human interactions with the oceans and seas on the aesthetic, religious and spiritual levels (including burials at sea), and ways in which these may be affected by other changes. There would also be a cross-reference to Chapter 26 (tourism).

**Chapter 9. Conclusions on major ecosystems services other than provisioning services**

Summary of the main issues (including capacity-building needs and information gaps) identified in Chapters 5 to 8.

## Part IV – Assessment of Cross-cutting issue: Food Security

**Chapter 10. Oceans and seas as sources of food**

Scale of human dependence on the oceans and seas for food, the variations between different parts of the world, and the extent to which some parts of the world depend on other parts for fish and sea-food.

**Chapter 11. Capture fisheries**

11.A. Commercial fish and shellfish stocks: present status and likely development over the next decade of fish and shellfish stocks that are commercially exploited – scale of economic activity.

11.B. Other fish and shellfish stocks: present status and likely development over the next decade of fish and shellfish stocks exploited by artisanal or subsistence fishing – significance for livelihoods – present status and likely development over the next decade of fish stocks not currently exploited.

11.C. Impacts of capture fisheries (commercial, artisanal and subsistence) on marine ecosystems, through effects on the food web, through by-catch (fish, mammals, reptiles, and sea-birds), through discards and through different fishing gear and methods (including long lines and extra long gill nets).

11.D. Illegal, unregulated and unreported fishing: scale, location and effects.

11.E. Policies and capacity-building needs for the management of commercial capture fisheries: extent of different management approaches and their impacts (including such issues as by-catch handling and discard requirements) – relationships to status of fish stocks.

11.F. Policies and capacity-building needs for the management of artisanal and subsistence fishing – relationships to status of fish stocks.

**Chapter 12. Aquaculture**

12.A. Scale and distribution of aquaculture: locations of aquaculture activities – species cultivated – economic significance.

12.B. Aquaculture inputs and effects: demand for coastal space – demand for fish meal from capture fisheries – use of chemicals – interactions of escaped stock with wild stocks.

12.C. Policies and capacity-building needs for the management of aquaculture.

**Chapter 13. Seaweeds and other sea-based food**

Scale and significance of food derived from the oceans and seas other than fish and shell-fish – potential impacts of its collection.

**Chapter 14. Social and economic aspects of fisheries**

14.A. Relationship with human health: benefits and problems from sea-based food – chemical, toxic and bacterial contamination.

14.B. Scale and significance of employment in fisheries (and aquaculture): numbers employed – adequacy of training – relationship of earnings to local median earnings – scale of injuries to fishers compared to other industries.

14.C. Role of fisheries in social structure: role of fishers in local societies – extent to which fishing is the sole source of livelihood – extent to which local societies are dependent on fisheries and aquaculture.

14.D. Social and economic impact of piracy on fisheries[17] – scale, location and effects.

14.E. Relationship between catch areas, ownership and operation of fishing vessels, landing ports and consumption distribution: what benefits do States (and economic operators based in them) obtain from fisheries (and aquaculture) in their territorial seas and EEZs? – which States (and economic operators based in them) benefit from high-seas fisheries?

14.F. Links to other industries: scale of economic activity dependent on fisheries (and aquaculture), both in providing equipment (especially ships) and in processing output.

**Chapter 15. Conclusions on food security**

15.A. Summary of the main issues (including capacity-building needs and information gaps) identified in chapters 10 to 14.

15.B. Longer-term development of food from marine resources – impacts of climate change – impacts of population changes – relation with changes in terrestrial food production.

[17] Piracy does not directly affect the marine environment, but is a significant social aspect of use of the marine environment.

## Part V – Assessment of other human activities impacting on the marine environment

### Chapter 16. Shipping

16.A. Significance of shipping in world trade: major shipping routes – amount of world trade carried by sea – economic benefits to States from shipping activities (including as flag States).

16.B. Seafarers: scale of employment – adequacy of training – relationship of seafarers' earning to median earnings – injuries suffered in the course of employment.

16.C. Threats from shipping: locations, scale and trends – pollution from shipping (MARPOL Annexes I to VI, anti-fouling treatments and noise) – the acoustic impact of shipping on marine wildlife - shipping disasters – invasive species through ballast water – transport of ships for ship-breaking – risks to coastal States from shipping compared to their trade.

16.D. Links to other industries and commerce: ship-building – ship-breaking – bunkers – insurance, chartering and navigation services.

16.E. Impacts of piracy on maritime transport[18]: locations, scale and trends.

16.F. Policies and capacity-building needs for managing shipping: international and national regulation – Special Areas, Particularly Sensitive Sea Areas (PSSAs) – enforcement.

### Chapter 17. Ports

17.A. Scale and significance of port activities: locations and traffic – likely growth – economic benefits to port States.

17.B. Impacts of the creation and maintenance of ports: scale of port development – dredging for navigational purposes – management of ships' waste (including effects of charging régimes) – pollution from ships in port – remobilisation of pollutants by dredging.

17.C. Policies and capacity-building needs for management of ports – relationship to shipping industry – relationship to fisheries and to international trade.

### Chapter 18. Submarine cables

18.A. Scale and significance of cables and cable-laying: role in internet – employment – links to other industries – economic benefits.

18.B. Potential pollution and physical harm from cables.
18.C. Policies and capacity-building needs for management of cables and cable laying – interference with other uses of the oceans.

[18] Piracy does not directly affect the marine environment, but is a significant social aspect of use of the marine environment.

## Chapter 19. Coastal, riverine and atmospheric inputs from land

19.A. Municipal waste water (including the impact of major cities and of cruise ships in harbours): scale and degree of treatment – nature of impact (both through direct and riverine inputs and including impacts on microbiological quality of coastal waters (economic impacts of adverse effects on water quality, especially on aquaculture and tourism)) – likely developments.

19.B. Industrial discharges (including point sources): hazardous substances (including persistent organic pollutants and heavy metals) – hydrocarbons – nutrients – scale of discharges (direct and riverine inputs and atmospheric transport) – degree of treatment – nature of impact (including impacts on human health through food chain) – likely developments.

19.C. Agricultural runoff and emissions: scale (direct and riverine inputs and atmospheric transport of nutrients) – nature of impact – likely developments.

19.D. Eutrophication: combined effects of municipal, industrial and agricultural inputs (considering also the effects of turbidity in coastal waters and denitrification in estuaries) – cross-reference to effects on fish stocks and effects on the food web.

19.F. Inputs of radioactive substances (from both nuclear and non-nuclear industries) – actual, potential and suspected impacts of inputs of radioactive substances.

19.G. Policies and capacity-building needs for managing the impact of land-based inputs: Global Programme of Action – regional conventions – national plans.

## Chapter 20. Offshore hydrocarbon industries

20.A. Scale and significance of the offshore hydrocarbon industries: location, scale of production and expected development – employment and risks to employees – adequacy of training for protection of the marine environment – economic benefits to States.

20.B. Impacts from exploration (including seismic surveys): scale and expected development.

20.C. Impacts from production: scale and expected development (including cuttings piles, chemicals used offshore, flaring, produced water) – sewage discharges from installations.

20.D. Offshore installation disasters and their impacts.

20.E. Decommissioning.

20.F. Impact of piracy on offshore installation[19]: location, scale and trends.

[19] Piracy does not directly affect the marine environment, but is a significant social aspect of use of the marine environment.

20.G. Policies and capacity-building needs for management of offshore hydrocarbon installations.

**Chapter 21.** *Other marine-based energy industries*

21.A. Scale of wind, wave and tidal power generation – current, planned and forecast.

21.B. Environmental benefits and impacts of wind, wave and tidal power generation.

21.C. Expected economic performance of wind, wave and tidal power generation.

21.D. Policies and capacity-building needs for management of offshore non-hydrocarbon energy installations.

**Chapter 22. Offshore mining industries**

22.A. Scale and significance of sand and gravel extraction: sustainability of sand and gravel extraction (including relationship to sand and gravel from land) – environmental impacts of sand and gravel extraction.

22.B. Economic benefits and social effects of sand and gravel extraction.

22.C. Developments in other sea-bed mining: current state and potential scale.

22.D. Policies and capacity-building needs for the management of offshore mining industries.

**Chapter 23. Solid waste disposal**

Types and amounts of waste dumped at sea (including potential impacts on the marine environment), and the policies and capacity-building needs to manage such dumping.

**Chapter 24. Marine litter**

24.A. The multiple causes (inadequately controlled land-based disposal of waste, inadequate control of beach litter, ship-generated litter) of marine litter and the scale and distribution of the problem.

24.B. Policies and capacity-building needs for combating marine litter.

**Chapter 25. Land/sea physical interaction**

25.A. Land reclamation: scale and location of land reclamation and habitats affected – policies and capacity-building needs for the management of reclamation.

25.B. Erosion of land by the sea: economic and social costs of land erosion – effects on marine and coastal habitats of coastal defences (including beaches and fringing islands) – costs of coastal defences – policies and capacity-building needs for coastal defence.

25.C. Sedimentation changes: sedimentation in the marine environment as a result of land erosion by rainfall and rivers – decline in marine sedimentation as a result of water management – effect of both types of change on marine and coastal habitats (including estuaries, deltas, submarine canyons) – policies and capacity-building needs to control sedimentation changes.

**Chapter 26. Tourism**

26.A. Location and scale of tourism (including cruise ships): employment – economic benefits of tourism – cross-reference to marine biodiversity.

26.B. Contribution of tourism to problems of sewage and pollution (including from cruise ships) (cross-reference to heading 19B (municipal waste water)).

26.C. Location and scale of other environmental problems of tourism (including habitat disturbance and destruction).

26.D. Policies and capacity-building needs for managing the environmental impacts of tourism.

**Chapter 27. Desalinisation**

Scale of desalinisation, its social and economic benefits and its environmental impacts.

**Chapter 28. Marine genetic resources**

28.A. Current scale of research and exploitation.

28.B. Policies and capacity-building needs related to research and exploitation for marine genetic resources.

**Chapter 29. Defence**

29.A. Scale and location of the impacts of recurrent defence (naval, military and air force) operations on the marine environment (including the scale of areas closed for defence purposes).

29.B. The acoustic impact of recurrent defence operations on marine life.

29.C. The scale of dumping at sea of unwanted munitions and problems resulting from dumped munitions.

**Chapter 30. Marine scientific research**

30.A. Scale and location of marine scientific research – ARGO initiative.

30.B. Policies and capacity-building needs related to marine scientific research (including capacity-building).

**Chapter 31. Conclusions on other human activities**

Summary of the main issues (including capacity-building needs and information gaps) identified in chapters 16 to 29.

## Part VI – Assessment of marine biological diversity and habitats

***Section A – Ecologically and biologically sensitive areas and vulnerable marine ecosystems***
*[These are types of areas and ecosystems which have already been identified at the global level, including by the Convention on Biological Diversity and the United Nations Food and Agriculture Organization, as needing special attention]*

**Chapter 32. Coral (and other biogenic) reefs**

Types, locations, scale, status and threats.

**Chapter 33. Mangroves, salt marsh and other macro-vegetation areas**

Types, locations, scale, status and threats.

**Chapter 34. Seagrass and eel-grass beds**

Types, locations, scale, status and threats.

**Chapter 35. Kelp forests**

Types, locations, scale, status and threats.

**Chapter 36. Seamounts, deep-sea banks and plateaus**

Locations, numbers, status and threats.

**Chapter 37. Hydrothermal vents**

Locations, scale, status and threats.

**Chapter 38. Other types of EBSAs and VMEs**

Types, locations, numbers and extent, status and threats.

**Chapter 39. Policies for the protection of EBSAs and VMEs**

Policies and capacity-building needs for the protection of EBSAs and VMEs – including marine protected areas, fisheries policies, shipping policies (including Special Areas and Particularly Sensitive Sea Areas), Ramsar Convention wetlands.

***Section B – Other species and habitats to which attention should be drawn***

*[To assess in sufficient detail all marine species and habitats would make the first integrated assessment far too long. The aim would therefore be to identify and assess species and habitats which call for attention at the global level, either because they raise issues beyond those that can be handled at the national or regional level (such as species that migrate between regions), or because national and regional efforts need outside support, or because the issues are of global importance. The list of species and habitats to be covered can only be settled when the criteria for selecting such species and habitats have been agreed. The proposed workshops (see paragraph 22 of the Set of Options and Annex D) would be suitable for discussing these criteria.]*

**Chapter 40. Migratory species**

40.A. Species depending on a range of regional ecosystems
- (a) Migratory marine mammals: distribution, numbers, status and threats
- (b) Sea turtles: distribution, numbers, status and threats
- (c) Highly-migratory fish species: distribution, numbers, status and threats
- (d) Migratory sea-birds: distribution, numbers, status and threats.

40.B. Policies and capacity-building needs for the protection of migratory species.

**Chapter 41. Other threatened and endangered species**

41.A. Criteria for identification.

41.B. Species, distributions, numbers, status and threats.

40.C. Policies and capacity-building needs for their protection.

**Chapter 42. Other threatened and endangered habitats**

42.A. Criteria for identification.

42.B. Types of habitat, distributions, extent, status and threats.

42.C. Policies and capacity-building needs for their protection.

***Section C - Summary***

**Chapter 43. Summary**

Summary of the main issues (including capacity-building needs and information gaps) identified in chapters 32 to 42.

## Part VII – Overall Assessment

### Chapter 44. Overall assessment of human impact on the oceans

Evaluations under different methods of assessing overall human impact on the oceans and seas.

### Chapter 45. Overall value of the oceans to humans

Evaluations under different methods of the benefits accruing to humans from the oceans.

# ANNEX D

## Suggestions of the Group of Experts established pursuant to resolution 64/71 to the Ad Hoc Working Group of the Whole at its meeting in 2010 on building networking between the Regular Process and existing assessment processes, as adjusted subsequent to resolution 65/37

1. A series of regional workshops could be organized to enable the further development of the fundamental building blocks and related issues identified in the report on the results of the assessment of assessments (A/64/88, annex).[20]

2. To cover the major regions of the world's seas adequately, while avoiding an excessive number of such workshops, there could be around seven such workshops. As a possible illustration, these might be arranged in locations suitable for:

a) the North Pacific
b) the South Pacific
c) the eastern and south-eastern Asian Seas (including the Indonesian seas)
d) the northern Indian Ocean, the Arabian Sea, the Red Sea and Gulf of Aden and the ROPME/RECOFI area
e) the southern and western Indian Ocean
f) the North Atlantic, the Baltic Sea, the Mediterranean Sea and the Black Sea
g) the South Atlantic (between the African and American coasts) and the wider Caribbean.

3. Separate workshops may not be needed for the Arctic and Antarctic. However, the international bodies concerned with those areas, in particular, the Arctic Council and the Commission on the Conservation of Antarctic Marine Living Resources, could be invited to consider, and to comment on, the issues proposed for the workshops.

4. The Ad hoc Working Group of the Whole could request Governments and relevant international organizations to organize such workshops with the assistance of the Secretariat of the Regular Process, as appropriate, and members of the Group of Experts of the Regular Process.

5. Governments and/or relevant international organizations could be identified to host such workshops, either on their own or jointly. Some or all regional workshops may not be organized under the auspices of the United Nations as such status may imply requirements which would delay their timely convening.

[20] See also UNEP and IOC-UNESCO. (2009) An Assessment of Assessments, Findings of the Group of Experts Pursuant to General Assembly resolution 60/30. Start-up phase of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment including Socio-economic aspects. UNEP and IOC/UNESCO, Progress Press, Malta. Available at http://www.unga-regular-process.org/.

6. States and relevant international organizations may attend the workshops related to a marine area in which they are interested.

7. The Secretariat could be requested to notify all States and relevant international organizations of the workshops that will be organized.

8. States and relevant international organizations that cannot take part in the workshops could contribute to workshops through written comments.

9. The agendas of such workshops could be focussed on the elements identified by the Group of Experts established under resolution 64/71 in the Information Material that they produced. For ease of reference, these elements are reproduced in the Appendix to these suggestions. In addition, the workshops should be asked to identify perceived policy needs from the regional perspective.

10. Members of the Group of Experts may be identified to attend the workshops in order to establish liaison between the workshops and the Regular Process.

# APPENDIX

## Agenda for the proposed workshops

1. Each workshop could be invited to produce the following to the extent possible, as appropriate, for the marine area that it covers:[21]

(a) An annotated inventory of the economic, social and environmental assessments conducted in each region, including for each assessment:

(i) Agency conducting the specific assessment;
(ii) Major client(s) for the assessment, and their major uses of it;
(iii) Spatial and temporal scale of the assessment, and frequency of assessment cycle;
(iv) Types of data, experiential knowledge, indicators, and other information sources contributing to the assessment;
(v) Methods for analyzing status and trends of component information sets;
(vi) Extent of, and methods for, integration of different types of information, particularly social, economic and ecological information;
(vii) Sources of reference levels or ecotoxicological assessment criteria used in the assessment;
(viii) Extent and sources of forecasts, projections, and scenarios used in the assessment;
(ix) How data-extrapolation errors, uncertainties and information gaps were addressed in the assessment;
(x) The costs (where known) of conducting the assessment.

(b) A review of the approaches used in the regional assessments for handling risks and uncertainties identified in the assessment;

(c) For components needed for a fully integrated assessment, but for which one-off or on-going assessment processes do not exist, information would be needed covering at least:

(i) What types of relevant data are known to be collected and managed, and by what State(s) and agencies (this is expected to be the case for some key social and economic data);
(ii) Where key types of information are not known to exist, can expert knowledge be entrained to fill the gap, and if so, how can the experts be accessed?

(d) Before the conclusion of each regional workshop, key follow-up steps will be planned including:
(i) Confirmation of regional, national, and agency points of contact;

[21] From paragraph 31 of the Information Material.

(ii) A short-term capacity-building plan to mobilize the information and knowledge that is known to exist within the region, but has not yet been systematically organized in a way that would allow its use for the Regular Process;
(iii) A schedule of short-term actions that could facilitate greater compatibility of spatial and temporal scales of data, information, and analyses to enable existing assessment results to be better integrated;
(iv) A plan (including contacts) for on-going communication with the users of the existing regional assessments, to ensure that they stay informed of activities of the Regular Process and the Regular Process remains aware of, and responsive to, their needs.

2. Each workshop could also be invited to take stock of the needs for longer-term capacity-building, including the following:[22]

(a) Taking stock of capacity-building activities of past and present national, regional and global projects in monitoring and assessments of the oceans, specifying specialties developed and technology transfers involved. New projects, about to be commissioned or to start, could be included;

(b) Taking stock of national and regional ocean and marine research and training institutions and assess their capacity in terms of human resources, infrastructure and facilities for monitoring and assessments of regional seas and their ability to undertake integrated assessments;

(c) Taking stock of existing regional expert networks and their suitability in playing major roles in strengthening capacity at the regional level;

(d) Taking stock of effective capacity for regional communication strategies;

(e) Identifying and, if necessary, establishing fellowship programmes for developing marine science and assessment skills; and

(f) Identifying the capacity needs for effective integration of the science and the policy in the assessments.

[22] From paragraph 45 of the Information Material.

# ANNEX E

## Draft timetable for the first integrated assessment under the Regular Process

| DATE | ACTION OR EVENT |
|---|---|
| February 2011 | Ad Hoc Working Group of the Whole approves arrangements for the preparation of the first integrated assessment report |
| March – November 2011 | Regional workshops |
| March – November 2011 | Nominations by States, intergovernmental organizations and non-governmental organizations in consultative status with ECOSOC of suitable persons to act as lead drafters and consultors |
| Early-mid December 2011 | Meeting of the Group of Experts to finalize<br>(a) The outline of the first integrated assessment report, and<br>(b) The guidance to authors<br>in the light of comments from the regional workshops, and to select<br>(c) Lead drafters for working papers, and<br>(d) Panels of consultors<br>(all subject to approval by the management and review mechanism, if established and applicable) |
| January – March 2012 | Lead drafters prepare working papers |
| April – May 2012 | Consultors comment on working papers |
| June – July 2012 | Lead drafters revise working papers in the light of consultors' comments |
| Late August 2012 | Meeting of the Group of Experts to<br>(a) Make any necessary changes to the outline of the first integrated assessment report, and<br>(b) Identify lead drafters for draft chapters<br>(subject to approval of the management and review mechanism, if established and applicable) |
| Early September 2012 | Meeting of the Ad Hoc Working Group of the Whole to review progress |
| October – December 2012 | Period when anything that has not been completed may be completed, and lead drafters can start preparation of draft chapters |
| December 2012 – February 2013 | Lead drafters prepare draft chapters |
| March – April 2013 | Consultors comment on draft chapters |
| May – June 2013 | Revision of draft chapters by lead drafters in the light of consultors' comments |
| End June 2013 | Completion of draft chapters by lead drafters |
| July – August 2013 | Group of Experts prepares draft first integrated |

| | |
|---|---|
| | assessment report |
| Early September 2013 | Meeting of the Group of Experts to complete the draft first integrated assessment report |
| October – December 2013 | Review of the draft first integrated assessment report by States, intergovernmental organizations and peer-reviewers |
| January – March 2014 | Revision of the chapters of the draft first integrated assessment by the chapter editors in the light of the comments from States and peer-reviewers |
| Late April 2014 | Meeting of the Group of Experts to agree on the final text of the first integrated assessment report |
| May 2014 | Copy-editing of the final text of the first integrated assessment report |
| End May 2014 | Submission of the final text of the first integrated assessment report by the Group of Experts to the United Nations Secretariat |
| Summer 2014 | Translation of the Summary for Decision-Makers |
| September 2014 | Presentation of the first integrated assessment report to the Ad Hoc Working Group of the Whole (preceded by consideration by the management and review mechanism, if established and applicable) |
| Late autumn 2014 | Consideration of the first integrated assessment report by the General Assembly during its 69th session |

**Note**

This draft timetable implies:

(a) Two further meetings of the Ad Hoc Working Group of the Whole (early September 2012, and early September 2014);

(b) Four meetings at least of the Group of Experts of the Regular Process (December 2011, August 2012, July/August 2013, late April 2014). Further meetings of the Group of Experts would be necessary if the work cannot be completed in the time available for these meetings.