

The Way Forward

Framework and Options for the Regular Process

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This chapter builds on the previous chapters to present a possible way forward for the Regular Process. It considers what the Regular Process can deliver and relates the content of a possible first cycle of the Regular Process to forthcoming milestones relevant for oceans policy.

It sets out a framework for the Regular Process consisting of (1) an overall objective, (2) a description of the overall scope within which Regular Process assessments will be designed, (3) a set of principles to guide the establishment and operation of the Regular Process and (4) best practice to be followed in designing and implementing key features of the Regular Process and applying the principles.

Potential products from a first cycle are considered in relation to four fundamental building blocks: capacity building, improving knowledge and methods of analysis, enhancing networks among existing assessment processes and international monitoring and research programmes and, lastly, creating communications tools and strategies for the products of the Regular Process.

The next section of Chapter 5 considers six institutional aspects of the Regular Process, together with options: (1) the relationship of the Regular Process to the United Nations; (2) the establishment of a Management and Review Body (MRB) for the Regular Process; (3) a Panel of Experts for the Regular Process; (4) an additional Pool of Experts for the Regular Process to draw on; (5) a Secretariat for the Regular Process and (6) Focal Points within governments, international organizations (global and regional), the private sector and civil society organizations to facilitate interaction and collaboration with the Regular Process.

A final section addresses options for financing the Regular Process, including an appendix which further develops how to implement the first cycle and provides an overall indication of the levels of financing that might be needed.

WHAT THE REGULAR PROCESS CAN DELIVER

- 5.1 Marine ecosystems provide essential support to human well-being. However, they are undergoing unprecedented environmental changes, driven by human activities, and becoming depleted and disrupted (see paras. 1.6–1.13). Keeping the world's oceans and seas under continuing review will help to improve the responses from national governments and the international community to the challenges posed by these changes. Reviews based on sound science can help the world as a whole understand better what is happening, what is causing it, what the impacts are and what the potential response options might be for addressing these changes and their impacts.
- 5.2 Chapter 3 shows the immense variety of existing assessments. They are carried out on many different scales – local, national, regional, supra-regional and global. While it is essential to build on existing assessments, there is an urgent need for a more integrated approach, at the global level as well as at the regional and sub-regional levels. Such an integrated approach will help to develop a more coherent overview of the state of the global marine environment and its interactions with the world economy and human society. A better understanding is needed of how human activities themselves interact and cumulatively affect different parts of marine ecosystems. The relative risks and benefits of different responses to anthropogenic impacts, both direct and indirect, need to be assessed. Baselines, reference points and reference values will also be needed as a basis for evaluating status and trends over time. More consistent information, both in coverage and quality, and integrated analyses will improve understanding of the rapid changes that are occurring in the oceans. The resulting knowledge will facilitate decisions to manage in a sustainable manner human activities affecting the oceans and thus progress towards the Millennium Development Goals.
- 5.3 In 2005, the United Nations General Assembly recognised the possibility of such benefits in deciding to launch a start-up phase towards the Regular Process (Resolution 60/30). This Regular Process will be a means for integrating existing information from different disciplines to show new and emerging patterns and to stimulate further development of the information base. A global,

Regular Process can add to existing processes on different scales in many respects, as well as resolve the five problems identified in paras. 3.73–3.74. It can:

- a. Demonstrate the importance of oceans to human life and as a component of the planet:
As a **global** mechanism, the Regular Process can provide an overview of the goods and services that human society derives from ocean ecosystems and how human activities impact on them. As a **regular** process it can provide updated information on the seven-tenths of the planet covered by the oceans – on status, trends, the likely causes of change, uncertainties and the implications for human well-being;
- b. Integrate, analyze and assess, environmental, social and economic aspects of all oceans components and interactions among all sectors of human activity affecting them; it will thus support sustainable, ecosystem-based management throughout the oceans:
As a **global** and **regular** process, it can strengthen existing assessment processes by encouraging more integrated approaches at larger scales. It can scale up regional patterns and identify shared problems and priorities across regions (without losing sight of the significant variations that may exist between regions). It can also clarify linkages among regions, whether from large-scale pressures, important habitats or species occurring across regions, shared large-scale natural processes (such as *El Niño*), possible transfers of problems among regions (for example, from dumping or over-fishing) or shared socio-economic factors such as impacts on tourism or fishing. It can furthermore identify issues where we do not yet know enough to manage human activities effectively and promote research to fill these knowledge gaps;
- c. Promote well-designed assessment processes, conducted to the highest standards and fully documented by those responsible for them:
As a **global** process, it can help ensure high standards of assessment across all regions. As a **regular** process, its iterations will promote continuing improvement;
- d. Promote international collaboration to build capacity:
As a **global** process, the Regular Process can help identify priorities for building human capacity and infrastructure to

monitor, analyze and assess the state of the marine environment (including social and economic aspects) in all parts of the world, help design and facilitate cost-effective, collaborative initiatives for this purpose and help mobilize the necessary resources. As a **regular** process, it can ensure that there are continuing and consistent efforts to these ends;

- e. Improve the quality, availability, accessibility, interoperability and usefulness of information for ocean assessment; it will also increase consistency in the selection and use of indicators, reference points and reference values:

At the **global** level, the Regular Process can promote and disseminate cost-effectively standards for environmental, social and economic data that enhance integration at all levels and comparability across regions, facilitate a global synthesis and mobilize collaborative efforts to fill major data, assessment and research gaps. It can draw attention to advances in assessment techniques that can be utilized more widely. As a **regular** process, it can promote the ongoing production, availability and accessibility of information;

- f. Support better policy and management at the appropriate scale by providing sound and integrated scientific analyses with effective links to decision making by relevant authorities:

At the **global** level, the Regular Process can clarify linkages among sectors, across ecosystem components and at different geographic scales, so as to facilitate more integrated policy development and priority-setting and better coordination among decision-makers at all levels. It can also help to identify the likely consequences of options for managing human activities and the appropriate scale or level for decision making. As a **regular** process, it can provide a basis for evaluating the effectiveness of policies and thus enable oceans policies to respond and adapt quickly to new information and emerging concerns;

- g. Build on existing assessment frameworks, processes and institutions and thus promote cooperation among governments and at the level of international institutions:

At the **global** level, the Regular Process can draw upon national, regional and supra-regional efforts and help them to deliver the elements mentioned above. It will be able to identify synergies among sectoral and thematic assessment processes

that could strengthen collaboration in marine assessment. It can support better networking among all concerned. As a **regular** process it will be able to ensure a consistent, long-term approach to international collaboration.

- 5.4 Assessment is a necessary, integral part of the cycle of adaptive management of human activities that affect the oceans. Research provides insights into processes affecting the oceans and how to deal with them, while monitoring makes it possible to detect changes over time and assess the effectiveness of policies previously adopted. In the first stage, the knowledge from research and monitoring needs to be assembled and analyzed on a regular basis if policy-makers are to develop appropriate and timely responses to the threats to the oceans. Policy-makers are further guided by assessments that link potential solutions (response options) to the problems identified, especially when the assessments contrast the likely outcomes and risks of each option or identify impediments to the implementation of past policies. The results then allow decision-makers to set priorities, evaluate trade-offs and refine their response. They can also identify gaps and determine where further research is needed to support decision-making needs. In the next stage, progress is reviewed based on new information and analysis, thus re-starting the cycle. This next stage also shows how to make the assessment process and its *products* more influential. With each cycle, the capacity for assessment should improve at all levels. In practice, there is not a simple, single-track cycle of this kind; the work may flow in different directions and combine one or more stages. The underlying cyclical pathway for making progress, however, is vital. The process must preserve and build on knowledge from one assessment to the next.

SCHEDULING THE REGULAR PROCESS

- 5.5 There are three forthcoming milestones particularly relevant for oceans policy and therefore for the work of the Regular Process. At these milestones, it will be helpful to be in a position to demonstrate what is being achieved:
- a. 2012 will mark ten years from the 2002 Johannesburg World Summit on Sustainable Development (WSSD) which recommended the creation of the Regular Process;

- b. 2014 will mark the 20th anniversary of the entry into force of the United Nations Convention on the Law of the Sea (UNCLOS) which recognizes that the problems of ocean space are closely interrelated and need to be considered as a whole;
- c. 2014 is also the planned date for the next consideration of the world's oceans and seas by the Commission on Sustainable Development (CSD) (and, in the light of the CSD decisions, by the UN Economic and Social Council and the UN General Assembly).

- 5.6 Moreover, several important oceans targets, endorsed by the WSSD, are approaching. These include:
- a. Encourage the application by 2010 of the ecosystem approach;
 - b. Establish marine protected areas (MPAs) consistent with international law and based on scientific information, including representative networks by 2012; and
 - c. Maintain or restore fish stocks to levels that can produce maximum sustainable yield (MSY) with the aim of achieving these goals for depleted stocks on an urgent basis and where possible no later than 2015.

These are complemented by the Convention on Biological Diversity (CBD) goal of achieving a significant reduction in the current rate of biodiversity loss by 2010. Achieving these goals will contribute to improving human health, food security, poverty alleviation and disaster preparedness as set out in the Millennium Development Goals.

- 5.7 It would be consistent with these commitments if the first cycle of the Regular Process were to cover the period 2010–2014. A longer period would mean that the contributions of the Regular Process would not be available for these milestones. A shorter period would limit significantly what could be delivered.

FRAMEWORK FOR THE REGULAR PROCESS

- 5.8 This report now sets a framework within which the Regular Process can deliver its goals. This framework consists of
- a. An 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. Best practice to be followed in designing a Regular Process and applying the principles.

Overall objective of the Regular Process

5.9 Chapter 4 has shown the importance of a clear understanding of objectives in setting up both an assessment process and individual assessments. A clear formulation of the overall objective of the Regular Process is therefore fundamental to selecting among options for setting it up, including institutional arrangements and financing.

5.10 The Group of Experts suggests the following formulation of the overall objective for the Regular Process:

“The Regular Process under the United Nations for global reporting and assessment of the state of the marine environment, including social and economic aspects, will serve as the mechanism to keep the world’s oceans and seas under continuing review by providing regular assessments at global and supra-regional levels:

- (a) The individual assessments under the Regular Process will support informed decision making by enabling governments and other stakeholders to draw on the best scientific information available and thus contribute to managing in a sustainable manner human activities which affect the oceans and seas;
- (b) These assessments will focus on a fully integrated view of environmental, economic and social aspects. As the Regular Process progresses, it should encourage additional fully integrated ecosystem assessments at the appropriate geographic scale, especially at regional and sub-regional levels, and, according to need, undertake selected sectoral or thematic assessments;
- (c) These Regular Process assessments will draw, as far as possible, upon assessments made at global and supra-regional levels, at the regional level and, where appropriate, at the national level. The Regular Process will therefore seek to stimulate regional, sub-regional and national assessment processes, by promoting capacity building, by strengthening the knowledge base, by encouraging inter-comparability and by facilitating networking among institutions and individuals concerned with marine assessment;

- (d) These assessments will be underpinned by consistent analytical frameworks and data standards, and will deliver products to communicate effectively to policy-makers. In parallel, the Regular Process will build institutional and individual assessment capacity and promote necessary research.”

Scope of the Regular Process

5.11 The examination of existing assessment processes in Chapter 3 and the analysis of best practices in Chapter 4 show the importance of clearly defining the scope of any assessment, to make clear the fields within which it is to operate. The Group of Experts proposes the following:

“The scope of individual assessments under the Regular Process will be defined in terms of:

- (1) **Geographical coverage:** The individual assessments under the Regular Process will be concerned either with assessments that cover all the world’s oceans and seas (“global assessments”) or with assessments that cover issues relevant to several ocean regions (“supra-regional assessments”);
- (2) **Sustainability:** Whenever relevant to an assessment, the Regular Process will make arrangements for assembling, analyzing, assessing and integrating information on the environmental, economic and social aspects – the three pillars of sustainable development. It will cover all human activities that utilize and have the potential to impact the marine environment;
- (3) **Analytical framework:** Unless special circumstances warrant another approach, the Regular Process will use the framework of Drivers – Pressures – State – Impacts – Responses (DPSIR) in its analyses, and promote cross-sectoral ecosystem approaches to assessment. As relevant, it will seek to identify the management responses that have already been taken, to evaluate their success in addressing the relevant pressures and improving the state of the marine environment,¹ and to evaluate future options for response and their likely outcomes and risks, as well as the costs of inaction, as a basis for decision making;

¹ As explained in para. 2.16, “response assessments” identify and evaluate responses that reduce human contributions or vulnerabilities to environmental changes.

- (4) **Vulnerability:** When conducting any assessment, the Regular Process will seek to identify the groups of people, natural processes and non-human species and habitats that are particularly vulnerable to the pressures identified, and evaluate the risks to them;
- (5) **Forward-looking:** Whenever relevant to an assessment, the Regular Process will seek to include not only conclusions on the current state of the marine environment and related human activities but also outlooks on future states, using accepted procedures that are fully documented."

Guiding principles for the Regular Process

- 5.12 The Group of Experts identified several principles which together should guide the establishment and operation of any assessment process, including the Regular Process. These principles reinforce the application of the principles adopted at the 1972 Stockholm Conference on the Human Environment and the 1992 Rio de Janeiro Conference on Environment and Development. They also support commitment to the attributes of relevance, legitimacy and credibility which help both assessment *process* and *products* to be viewed as authoritative and influential. They should be reflected in the particular practices established for, and by, the Regular Process, and in its institutional arrangements. The Group of Experts recognises that there is some degree of overlap between these principles and the formulation of the overall objective and scope of the Regular Process. Nevertheless, in the light of its conclusion on the value of establishing principles, the Group of Experts proposes that the following eight principles elaborated (see paras. 4.4–4.12) should guide the Regular Process:
- "(1) Viewing the oceans as part of the whole Earth system;
 - (2) Regular evaluation of assessment products and the process itself to support adaptive management;
 - (3) Use of sound science and the promotion of scientific excellence;
 - (4) Regular and proactive analysis to ensure that emerging issues, significant changes and gaps in knowledge are detected at an early stage;
 - (5) Continuous improvement in scientific and assessment capacity;

- (6) Effective links with policy-makers and other users;
- (7) Inclusiveness with respect to communication and engagement with all stakeholders through appropriate means for their participation
- (8) Transparency and accountability for the process and its products.”

Best practice guidance on key design features for the Regular Process

- 5.13 The Group of Experts identifies in para. 4.15 eleven key design features that make assessments influential and sets out in Chapter 4 best practices for achieving each of them. A twelfth key design feature (“Institutional Arrangements”) is also identified and discussed in para. 4.83 onwards. The Group of Experts recommends that the guidance on best practices for the first eleven key design features, as described in paras. 4.17–4.82, should be used in the development and implementation of the Regular Process. These eleven key design features are:
- a. The objectives and scope of individual assessments;
 - b. An effective relationship between science and policy;
 - c. Modalities for stakeholder participation;
 - d. Nomination and selection of experts;
 - e. Data and information: sourcing, quality assurance and the availability and accessibility of underlying data and information;
 - f. Treatment of lack of consensus among experts;
 - g. Treatment of uncertainty;
 - h. Peer review;
 - i. Effective communication;
 - j. Capacity building and networking;
 - k. Post-assessment evaluation.
- 5.14 Some of these design features will need to be included in the decisions establishing the Regular Process. Other, more detailed aspects need to be addressed by the institutions that manage and guide the Regular Process. The practices which are especially important in the initial establishment of the Regular Process cover:
- a. **Participation – roles and responsibilities:** Within the agreed institutional arrangements, the respective roles and responsibilities of governments, experts, the secretariat and other stakeholders should be clearly articulated in order to

avoid misunderstandings, promote transparency and ensure the integrity and influence of the Regular Process;

- b. **Assessment procedures:** The scientific credibility of an assessment can be significantly affected by the approach taken on a number of procedural questions such as quality assurance, nomination and selection of experts, peer review and the treatment of uncertainty and lack of consensus among experts. These procedures should be agreed in advance. In some cases this should be done generally for the whole of the Regular Process; in the remaining cases it should be done in advance of each individual assessment. These procedures should be documented in assessment reports in the interests of transparency and accountability;
- c. **Capacity building and networking:** The initial stage of the Regular Process must include effective steps to identify the areas in which capacities need to be developed. The Regular Process will not itself be a prime means for building capacity, but it needs to identify what is needed for the various individual assessments under the Regular Process and to encourage other agencies to meet these needs. At the same time, the initial stage of the Regular Process needs to create the knowledge and methods of analysis needed to support its assessments and to strengthen marine assessment generally, and to improve networking among existing assessment processes on the state of the marine environment, including social and economic aspects.
- d. **Post-assessment evaluation:** Since one of the founding principles of an effective assessment process is that it should be iterative and adaptive, it is vital to agree on procedures to evaluate both assessment products and the Regular Process itself. This should include experts, policy-makers and other users (e.g., private sector), including both those involved in the assessment and those who have not been involved in any way.

THE FIRST CYCLE OF THE REGULAR PROCESS: 2010–2014

- 5.15 In order to support adaptive management the Regular Process will need to go through a succession of cycles. The products of the first cycle need to be specified as the Regular Process is established. The products and process of future cycles will be adjusted as a

result of the evaluation of previous cycles. These iterations will allow the Regular Process to incorporate learning into its work and to better target limited resources, concentrating on the fundamentals of improving marine assessment.

- 5.16 The Group of Experts recommends a first five-year cycle of the Regular Process from 2010 to 2014, which can demonstrate concrete achievements in relation to the opportunities identified above. During the early years (2010–2012), certain preparatory, supporting products will be developed to guide and strengthen marine assessment and support the objective of the Regular Process. During the later years (2013–2014) the first version of an integrated assessment of the oceans would be produced, establishing a baseline for future global assessments.

Fundamental building blocks

- 5.17 All cycles of the Regular Process will need to include the following fundamental building blocks if they are to continue to deliver improvements in marine assessment. The first steps, however, are especially important in order to:
- a. ***Build capacity*** at both individual and institutional levels – As a first step, to serve as a planning tool and to create a focus for existing efforts, the Regular Process should draw together the capacity-building needs identified as priorities in this report; where these needs cannot be met by existing capacity-building arrangements, the Regular Process can facilitate and promote a wide range of partnerships to satisfy them;
 - b. Improve ***knowledge and methods of analysis*** – As a first step, the Regular Process should identify priorities for filling the information gaps identified in this report and create and improve arrangements for assembling both economic and social information and physical, chemical and biological data from sources at the regional and national levels and for managing that information. It should develop agreed methods for using traditional knowledge and identify or develop the analytical tools and procedures necessary for integrated marine assessment;
 - c. Enhance ***networking*** among assessment processes, international monitoring and research programs and associated institutions and individuals as considered in the next section; and

- d. Create tools and strategies to ensure effective **communication** with all relevant stakeholders, including policy-makers, the scientific community and the general public at global and regional levels.
- 5.18 The preparatory, supporting products of the first cycle of the Regular Process considered further below will initiate steps to improve knowledge and methods of analysis, build capacity, enhance networking and initiate effective communications.

Networking with global, regional and national assessment processes

- 5.19 Enhanced **networking** with and among other assessment processes and international monitoring and research programmes should be an early goal of the Regular Process. The Regular Process also needs to build relationships with civil society and the private sector.² A wide range of individuals and organizations are likely to have useful data, information and methods for marine assessment.
- 5.20 The Regular Process will be in a position to identify and stimulate networking among institutions and experts at regional and supra-regional levels, within and across disciplines and among sectoral and thematic assessments. This can enhance the sharing of knowledge, expertise, methods and lessons learned as well as progress toward common data standards and guidelines. It will help avoid duplication of effort and improve compatibility of approaches. In all these relationships, the goal should be to promote information exchange and the infrastructures that enable it. This should include agreement on data policies and arrangements to catalogue and maintain data and information for use in future assessment iterations. As these networking relationships develop, the contributions of partners should be mutually acknowledged in the products of the Regular Process and its collaborators. These

² This includes specialized and sectoral users of the oceans, through professional and industry associations, primarily at the global level, for fisheries, oil and gas, tourism, aquaculture, fertilizer production, mining, renewable energy, shipping invasive species, ports and harbours and others, as well as specialized research institutes (private, academic). The World Ocean Council (www.oceancouncil.org) has recently been established as an international business and industry alliance for corporate ocean responsibility and could facilitate connections between the Regular Process and industry sectors. Because international industries increasingly follow the same practices wherever they operate around the world, they can be influential in identifying and promoting the application of “best practice” response measures in a given sector. Their input to the Regular Process in developing terms of reference for an assessment, nominating experts and ensuring that assessment products effectively target user communities will be especially valuable.

relationships can be built into the Regular Process through its management and expert mechanisms and through a network of focal points, considered below. The development of preparatory, supporting products for the first cycle of the Regular Process will help construct and test networking mechanisms.

- 5.21 At the *global* level, the Regular Process will be a source for marine components of global assessments covering wider fields (for example, the follow-up to the Millennium Ecosystem Assessment on biodiversity and ecosystem services or the Global Environment Outlook). It is especially important that the Regular Process promote and build upon existing schemes for compiling comparable, interoperable data from different regions. It will need to establish linkages with:
- a. Global monitoring and research programmes such as the Global Ocean Observing System (GOOS), the International Geosphere-Biosphere Programme (IGBP) and the Census of Marine Life (CoML) – to improve the comparability and interoperability of data across regions and at the same time ensure that this data is available for regional assessments;
 - b. Global conventions and agreements undertaking regular assessments – to determine how these processes and the Regular Process might support each other; that is, how these assessments and associated data may be used for purposes of the Regular Process, how they could contribute to filling information gaps and to developing a common global framework for data collection and quality, and how these other processes might benefit from the Regular Process in developing their own programmes;
 - c. Intermittent global reporting and assessment initiatives – to consider possibilities for harmonization of assessment time-frames so that they and the Regular Process can more easily draw upon, and assist, each other; and
 - d. The UN Statistics Division and the Global Environment Outlook on how their various information flows can best be aligned.
- 5.22 The *regional* level is a major focus of marine assessment. Networking with regional processes will therefore be vital for the Regular Process. It will need to create mechanisms for discussion and cooperation with appropriate regional seas programmes, regional fisheries bodies,

regional marine science bodies (where they exist) and other relevant regional organizations to address questions such as how the outputs they produce for their own purposes can feed into, and inform, the assessments made by the Regular Process, how the Regular Process can help regional assessments improve and make them more influential, and how data-management arrangements can be used for both regional and global purposes. Regional linkages with freshwater and land-based assessments, as well as climate change assessments, will be important. In developing these networks, the Regular Process will need not only to work with the staffs of regional bodies but also to involve national experts (especially where there are no existing regional bodies).

- 5.23 Because so many policies and measures for marine problems are adopted at regional and national levels, the Regular Process will assist the various regional assessment activities by providing a clear overview of the global context within which they function, including environmental, economic and social aspects, and of the linkages among regions. Moreover, since stakeholder engagement at the global level is inevitably limited, the regional level can play an important part in enabling regional organizations, associations and networks to make their input to the Regular Process. This can enhance both the legitimacy and policy relevance of inputs to the Regular Process, and thus its outputs. Enhanced legitimacy and relevance at regional scales is also likely to strengthen regional support for policy and management actions based on the outputs of the Regular Process.

Assessment products of the first cycle of the Regular Process (2013–2014)

- 5.24 The crucial added value of the Regular Process will be its ability to deliver *fully integrated assessments*, bringing together environmental, economic and social aspects. The centrepiece of the package of products that the first cycle will deliver should therefore be a first version of an integrated assessment of the world's oceans and seas. In order to provide a global overview, in-depth, integrated assessments in some regions will need to be combined with less advanced assessments in others; they will bring together what is known about the environmental aspects and in parallel begin to assemble and integrate the available economic

and social data. This will give a much better picture than is currently available as a basis for decision making. It can also help identify potential topics for future cycles of the Regular Process.

- 5.25 As part of this integrated assessment, there could also be a thematic assessment of a major cross-cutting aspect of the world's oceans, such as food security. This would help develop novel cross-disciplinary and cross-sectoral approaches.

Supporting products of the first cycle of the Regular Process (2010–2012)

- 5.26 In the early years of the first cycle of the Regular Process, the strategy and timetable for the production of the integrated assessment will need to be developed. Likewise, before the end of the first cycle, arrangements will need to be agreed for the eventual evaluation of the assessment and the process that produced it.
- 5.27 Preparatory, supporting products will be needed to develop the fundamental building blocks of marine assessment for the particular needs of the first cycle. They will improve knowledge and methods of analysis and thus strengthen capacity. They will build on, guide and improve existing assessments, especially at regional levels, and help move them toward a common approach. This, in turn, will lead to improved iterations of existing assessments and of those of the Regular Process. The workshops described in the Appendix to this Chapter will initiate communication and networking among existing assessment processes at global, regional and, where appropriate, national levels to develop the following products:
- a. A set of common questions and issues to be addressed (in differing degrees of elaboration) across all regions;
 - b. Agreed assessment methods for the datasets in different scientific fields;
 - c. An agreed approach to evaluating the risks that are identified;
 - d. A common framework and guidelines for data assembly. The framework and guidelines would provide a background against which future data collection might be organized by regional and national bodies, so that the data can be more effectively compared and used for different purposes. They would aim to strengthen data quality and interoperability. The framework and guidelines will need to take into account the limitations in

regions where data is sparse and to include arrangements for the use of traditional knowledge. In open ocean and deep-sea areas, further progress on biogeographic classification of ocean realms will help provide a framework and rationale for data collection and assessment efforts;

- e. An agreed approach for integrating the data and information and analytical results across sectors, ecosystem components and environmental, economic and social aspects;
- f. Methods to process digitally the available data, including the methodologies for quality assurance, modelling and the metadata that should eventually be assembled,

5.28 The first version of a global, integrated assessment will, inevitably, have shortcomings. It will be for future iterations, in the light of an evaluation of both *products* and *process* of the first cycle, to address these shortcomings and to produce ever better integrated assessments. Future cycles will enable the tools and methods to be further developed for bringing together information and assessments available at regional and other levels on environmental, economic and social aspects.

5.29 Thus, the preparatory products described above will be a first step towards the development and application of more refined methods and tools for assessment, including:

- a. Interdisciplinary methods of analysis that address environmental, economic and social aspects of the state of the marine environment;
- b. Methods and frameworks to strengthen assessment of marine habitat quality and extent, as habitat is the property that inherently integrates many ecosystem features and pressures from human activities;
- c. Methods to predict the risks and potential consequences (environmental, social and economic) of changes in the marine environment;
- d. Methods and approaches for scaling up and scaling down existing assessments to provide a more complete assessment of the state of the marine environment;
- e. Indicators and reference points that are cost-effective, facilitate supra-regional and global overviews and establish a basis for comparing status and trends over time;

- f. Initiatives to harness the powerful integrative capacity of the internet to make data openly accessible and to incorporate new dynamic aspects of internet data management to keep pace with the anticipated rate of change in ocean conditions.

OPTIONS FOR INSTITUTIONAL ARRANGEMENTS OF THE REGULAR PROCESS

- 5.30 This section covers six institutional aspects: (1) the relationship of the Regular Process to the United Nations; (2) the establishment of a Management and Review Body (MRB) for the Regular Process; (3) a Panel of Experts for the Regular Process; (4) an additional Pool of Experts for the Regular Process to draw on; (5) a Secretariat for the Regular Process and (6) Focal Points within governments, international organizations (global and regional), the private sector and civil society organizations to facilitate interaction and collaboration with the Regular Process. On the principle that “form follows function”, it first identifies functions and then considers options for an institutional mechanism, setting out advantages and disadvantages of the various options.
- 5.31 It is important to recall the discussion in Chapter 4 regarding the need for structured dialogue between decision-makers and experts – both in defining the objectives and scope of an assessment and the key questions for which decision-makers are seeking answers, and in conveying assessment findings. The experts need to clearly understand the needs of decision-makers at the outset, while decision-makers must be aware of any major limitations in available knowledge and methods that will affect assessment products. Regular updates for decision-makers on the progress of an assessment will allow course corrections to be made, and a full discussion between experts and decision-makers will help clarify assessment findings and any assumptions, risks and uncertainties.

Options for relationship with the United Nations

- 5.32 Resolution 57/141 affirmed that the Regular Process should be established “under the United Nations”. This indicates that it is the UN General Assembly to which the Regular Process is accountable.
- 5.33 With respect to establishing the Regular Process, the General Assembly can set its overall objective, scope and principles, agree

on its institutional elements, including their composition and terms of reference and make provision for periodic evaluation of the Process and its products. It could also endorse more detailed guidance on best practices to be applied in the Regular Process. The General Assembly can also take decisions on the proposed first cycle of the Regular Process (see paras. 5.24–5.27).

- 5.34 In the operation of the Regular Process, three functions would benefit from consideration by all UN member states and a wider range of stakeholders:
- a. The specification of the objective and scope of each individual assessment to be undertaken by the Regular Process, key questions to be answered and primary target audiences, in order to ensure that assessments are relevant for decision-makers;
 - b. Examination of the findings of assessments in order to draw out their implications for consideration by the appropriate decision-making body (or bodies); and
 - c. Periodic evaluations of the Regular Process and its products.

These functions involve too much detail to be assigned directly to the General Assembly. An informal UN meeting would allow more in-depth consideration, a free flow of discussion and participation by an appropriate range of stakeholders.

- 5.35 The functions noted above would be undertaken for each cycle of the Regular Process, although it may be practicable to amalgamate the work at the end of one cycle with that at the start of the next. It will be important to ensure that experts responsible for an assessment are available for dialogue in these meetings.
- 5.36 Two main options for relationship with the United Nations can be identified:
- a. The UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea (ICP), if the United Nations General Assembly so decides.³
- Pro:** The ICP is an established forum with arrangements for participation by all states and an appropriate range of other stakeholders. Since it meets annually, it could be asked to

³ It should be noted that the UN General Assembly decided in November 2008 that the ICP will focus its discussions at its tenth session in 2009 on the implementation of the outcomes of the ICP, including a review of its achievements and shortcomings in its first nine meetings (Resolution 63/111, para. 165).

consider progress reports from the Regular Process in the same way as it considers progress reports from UN Oceans.⁴ It can submit “agreed elements” for consideration in the development of UN General Assembly resolutions, so it has a route for suggesting calls to governments and global and regional bodies to undertake specific actions. At the same time the Regular Process, through its assessments, could assist the General Assembly both in deciding the topics that the ICP will consider and in providing the ICP with a means to keep up to date on progress made in relation to issues it has previously addressed;

Contra: The ICP is a non-permanent forum, which has been subject to renewal every three years. In addition, since it normally focuses on a specific aspect of the oceans selected by the UN General Assembly every year, the special skills of those attending the ICP may not be ideally suited to developing the objective, scope and other aspects of a proposed assessment under the Regular Process at the beginning of a cycle, nor for considering the report and findings at the conclusion of a cycle. Moreover, it may be difficult to allocate sufficient time for these discussions in the years when an assessment is initiated or concluded, depending on other topics before the ICP. These issues of attendance by the relevant, specialized decision-makers and sufficient time for dialogue (including with the assessment experts) are likely to be less problematic in years when the ICP considers only progress reports on the Regular Process.

- b. Alternatively, the UN General Assembly could convene *ad hoc* meetings to carry out the three functions in para. 5.34. One model is the *ad hoc* working group of the whole of the UN General Assembly convened to recommend a course of action regarding the Regular Process.⁵ Another model is *ad hoc* open-ended informal international workshops such as those convened by the UN General Assembly in June 2004 and June 2005 in conjunction with the ICP to consider the establishment of a Regular Process.⁶

4 UN Oceans is the inter-agency coordination mechanism on oceans and coastal issues.

5 Resolution 63/111.

6 Resolutions 58/240 and 59/24.

Pro: An *ad hoc* meeting is more likely to provide sufficient time for dialogue (including between experts involved in the assessment and decision-makers) and discussions might be more focused than would be possible in the ICP. While an *ad hoc* meeting of the whole allows participation by states and permanent observer organizations at the United Nations, the international workshops allow participation by states, a wider range of international organizations representative of other stakeholders and, where appropriate, experts involved in an assessment team. The report of an *ad hoc* meeting, including any “conclusions”, goes directly to the General Assembly for its consideration;⁷ in the ICP, the concerns of the Regular Process and related “agreed elements” would only be one of several sections in the report of the meeting. If an *ad hoc* meeting were convened in conjunction with the ICP (for example, when the topics under consideration in the ICP were likely to involve the same experts as would be relevant for consideration of a given assessment), there might be logistical and financial advantages for governments;

Contra: If meetings are convened on an *ad hoc* basis, there is no guarantee that they will occur, and there will be less continuity from one meeting to the next. If such meetings are not convened in conjunction with a relevant oceans meeting, they would have to be separately resourced; particular problems might be encountered in ensuring the participation of developing countries. In addition, the opportunity for states members of the United Nations and other stakeholders to discuss interim progress reports (between *ad hoc* meetings), including with experts from the Regular Process, is less apparent, although the ICP might still be utilized.

- 5.37 Whichever option is selected, it would be advantageous if the meeting were part of a long-standing or permanent structure which allows for regular review of the Regular Process and its products.

⁷ The “conclusions” of the 2nd International Workshop were endorsed by the General Assembly in Resolution 60/30 establishing the Assessment of Assessments.

Options for a Management and Review Body

- 5.38 The Regular Process will require a body to manage and oversee its operation and to ensure that agreed procedures are followed in the development and conduct of assessments. The Group of Experts considered three potential elements of its membership: government members, members drawn from intergovernmental organizations (IGOs) and additional members from the private sector, the scientific community and civil society.
- 5.39 This management and review body (MRB) will enhance continuity and consistency in the operation of the Regular Process and provide a means for the “managers” to engage in regular dialogue with the experts responsible for any assessment. It is necessary to be clear, however, about the distinct roles of the management body and the experts in relation to the final approval of assessment reports. The MRB will have a role in reviewing the conclusions and findings of an assessment and their implications for policy and decision making, in particular any response *options* presented and the risks associated with them. It should not modify the experts’ evaluations but rather build on them to ensure policy relevance and promote follow-up actions by the appropriate decision-making authorities. The MRB should be encouraged to report fully on its discussions and any conclusions and recommendations to the UN General Assembly, through the ICP or an alternative *ad hoc* meeting. To avoid any inappropriate influence on the experts carrying out individual assessments, the MRB should not be involved directly in substantive technical work. The experts should have the final word with respect to the accuracy and completeness of the factual analyses.
- 5.40 It is also necessary to be clear about the role of the MRB in relation to the role of all states members of the United Nations described in para. 5.34. The Group of Experts considers that a smaller, representative body of this kind, which can be thought of as a specialized working group of the larger UN membership, can have:
- a. Focused discussions of the objectives, scope and terms of reference for any particular assessment (subject to specifications from the General Assembly and taking into account discussions in the ICP or an *ad hoc* meeting); and

- b. Through its “review” role, lay the groundwork for productive discussion of assessment findings in the United Nations and other relevant decision-making bodies. Its purpose is not to second-guess the findings and conclusions of the expert assessment, but to present a considered view of their implications for policy-makers and the various global and regional bodies involved in ocean governance. This would be especially important in the case of a global, fully integrated assessment covering all aspects of the oceans.

5.41 The basic functions of a Management and Review Body can be summarised as follows:

- a. To oversee the Regular Process in accordance with its mandate; to agree on such matters as modalities for communication with and participation by stakeholders, means for transparency and accountability and procedures for nomination and selection of experts, quality assurance, access to information and peer review; to ensure that responsibilities for authors, reviewers and the secretariat are clearly articulated;
- b. To elaborate decisions and guidance from the UN General Assembly on the objectives, scope and terms of reference for an individual assessment, taking into account any further discussions in the ICP or the alternative *ad hoc* meeting;
- c. To initiate and approve proposals for assessments to the extent that this is not reserved to the UN General Assembly;
- d. To approve the programme/budget and finances of the Regular Process, and partnerships to support its work;⁸
- e. To give final approval to the selection of experts;
- f. To guide and oversee the development, organization and conduct of each individual assessment under the Regular Process, including approval of its objectives and scope, implementation plan and related budget and communications strategy; to consider regular progress reports from the assessment team and respond to any questions from them seeking clarification about their activities;
- g. To review and comment on the final products of each individual assessment under the Regular Process;

⁸ Subject to the financial arrangements agreed for the Regular Process and the budget approval procedures for the UN Secretariat and other relevant “host” institutions for the Regular Process.

- h. To promote networking among institutions engaged in marine assessment; and
 - i. To provide for a post-assessment evaluation (internal and external⁹) of each individual assessment under the Regular Process and ensure that the evaluation outcome is followed up in the practices and products of the Regular Process.
- 5.42 These functions require that members of the MRB are individually expert in marine scientific disciplines (natural or social sciences) and/or marine law and policy fields and collectively have broad expertise in both marine environmental assessment, including social and economic aspects, and in marine policy and management. The appointment of high-profile individuals would add to the quality, standing and visibility of the Regular Process. Chapter 4 identifies four basic options for the composition of the MRB (see para. 4.85). It can be composed:
- a. Solely of government members,
 - b. Solely of members drawn from intergovernmental bodies (that is, members of the secretariat/staff of these bodies),
 - c. Of a mix of members from governments, intergovernmental and non-governmental bodies (including the private sector, scientific organizations and civil society), or
 - d. Of an expert network of individuals and institutions with a smaller, core management group drawn from the network.
- 5.43 In practice, the management and review of the Regular Process will need to have a substantial majority input from states so that the Regular Process is responsive to their policy and decision-making needs and in order to fully engage states in the process. However, by involving other stakeholders in a balanced way, the influence of assessments (legitimacy, relevance and credibility) will be strengthened (as explained in Chapter 4).
- 5.44 The MRB should ideally work by consensus. However, it will be necessary to decide how it should proceed if consensus cannot be achieved. Experience in other forums suggests the principle that, while participants other than representatives of states should be free to speak and make proposals, decisions where consensus cannot

⁹ Meaning a review team comprised of individuals involved in the assessment (both “users” and the experts who produced the assessment) and of individuals who were not involved in the assessment in any way.

be reached should be reserved to the state members. (However, if the expenditure on the Regular Process is carried on the budgets of international organizations, then decisions with budgetary implications will need to be taken in accordance with the relevant organizations' financial procedures).

Membership of the MRB: member states

5.45 Dealing first with the involvement of states, there are two broad options:

- a. The MRB could be an open-ended body, open to all UN member states.¹⁰ In practice, such an open-ended body would need to have a bureau or executive committee, since an open-ended meeting is not a suitable forum for dealing with some of the more routine decisions described in para. 5.41;

Pro: This would ensure that all states are able to participate in at least some of the work of the MRB. An open-ended meeting might be appropriate for the "review" role contemplated in para. 5.40(b);

Contra: Even for a limited range of work, an open-ended meeting would be relatively cumbersome for effective management and review and it would be costly. Moreover, in view of the institutional relationship with the United Nations envisaged above, an open-ended meeting would be redundant;

- b. Membership of the MRB could be restricted to a representative subset of UN member states, with the membership rotating among member states over successive terms. Depending on its size, this body may need a smaller executive committee;

Pro: This can be tailored to produce an MRB which is large enough to contain the necessary range of experience and regional balance to ensure policy relevance and legitimacy and fully engage states, but still small enough to be effective for executive decisions and to reduce overall expenses.

Contra: Some states may feel that their concerns are not adequately taken into account in developing an assessment

¹⁰ The Intergovernmental Panel on Climate Change (IPCC) is an example of this approach. It is open to all member countries of WMO and UNEP. Its Bureau has 30 government members. Major decisions (for example, election of the IPCC Chair and IPCC Bureau, structure and mandates of the Working Groups and Task Forces and adoption of the IPCC work plan and budget) are taken in plenary sessions. Plenary sessions of the IPCC may be attended by hundreds of officials and experts from member countries.

under the Regular Process or in reviewing its findings, or they may not be well informed of developments in the Regular Process with the result that they do not pay much attention to assessment findings and their implications.

- 5.46 The means to appoint state members of the MRB could be modelled on the method used to establish the Ad Hoc Steering Group of the Assessment of Assessments: the government members were appointed by the President of the General Assembly in consultation with member states and regional groups, ensuring an adequate range of expertise and on an equitable geographical basis.
- 5.47 On balance the Group of Experts recommends that the MRB should have a limited number of government members appointed as specified in the paragraph above. The number could be set at between 18 (as in the Ad Hoc Steering Group¹¹) and 36 (to ensure a wider range of involvement and expertise). It should be noted that if the option of *ad hoc* meetings for relationship with the United Nations is selected, this would allow for more in-depth discussion of proposed assessments and their findings among all member states of the United Nations. Consequently, the number of states members of the MRB could be on the lower end and it could concentrate on “management” rather than “review” functions.

Membership of the MRB: intergovernmental organizations

- 5.48 The work of the Regular Process will inevitably touch upon the work of a substantial number of UN Specialized Agencies and other global bodies. To ensure proper linkages with these bodies, it is highly desirable that they be associated formally with the work of the Regular Process. The question then is which should be represented.
- 5.49 The AoA Ad Hoc Steering Group included six. Their work is so closely concerned with the issues that the Regular Process will address that the Group of Experts recommends that they should all be involved. These six bodies are:
- a. The Food and Agriculture Organization of the United Nations (FAO),

¹¹ That is, five member states from the African Group, five member states from the Asian Group, two member states from the Eastern European Group, three member states from the Latin American and Caribbean Group, and three member states from the Western European and other States Group.

- b. The Intergovernmental Oceanographic Commission of the UN Educational, Scientific and Cultural Organization (UNESCO-IOC),
- c. The International Maritime Organization (IMO),
- d. The International Seabed Authority (ISA),
- e. The UN Environment Programme (UNEP) and
- f. The World Meteorological Organization (WMO).

5.50 Another seven bodies could also be considered since their activities are relevant to important aspects of the Regular Process, including capacity building. Three of these organizations (marked *) are sponsors of GESAMP¹² and are therefore already concerned with marine scientific work. Another group (marked †) are members of UN-Oceans, the UN inter-agency coordination mechanism for oceans and coastal issues. These seven are:

- a. The Secretariat of the Convention on Biological Diversity (SCBD)†; The CBD Secretariat, particularly under the Jakarta Mandate, plays an important role in synthesizing and contributing to scientific and technical knowledge of the marine environment. Its inclusion could also help to reduce overlaps and avoid gaps between its work and that of the Regular Process.
- b. The Division for Ocean Affairs and the Law of the Sea (DOALOS) of the Office of Legal Affairs of the UN Secretariat*†; DOALOS serves as the Secretariat of the UN Convention on the Law of the Sea and the related UN Fish Stocks Agreement. It substantively assists the General Assembly in its annual review and evaluation of developments relating to ocean affairs and the law of the sea, which includes preparation of the annual report of the UN Secretary-General as the basis for these discussions. DOALOS also substantively services any relevant processes that are established by the General Assembly, for example, the ICP and the *ad hoc* meetings noted above;
- c. The International Atomic Energy Agency (IAEA)*†, The impact on the marine environment of human uses of nuclear energy is an issue of considerable concern in many parts of the world. The IAEA has a laboratory specialising in collecting information on radioactivity in the marine environment and its impacts.

¹² The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection. The current members of GESAMP are UN, FAO, IMO, UNESCO-IOC, WMO, IAEA, UNIDO and UNEP. WHO is a former member.

- d. The International Bank for Reconstruction and Development (IBRD – the “World Bank”)†;
The IBRD is very important for all aspects of financing and capacity building and supports substantial projects relating to sustainable ocean use;
- e. The UN Development Programme (UNDP)†,
The capacity-building functions of UNDP are significant for many of the issues with which the Regular Process will need to deal and UNDP has a large portfolio of GEF International Waters projects in LMEs;
- f. The UN Industrial Development Organization (UNIDO)*†,
The capacity-building functions of UNIDO may be significant for many of the issues with which the Regular Process will need to deal;
- g. The World Health Organization (WHO)†,
WHO deals with human health which can be significantly affected by many aspects of the marine environment, such as microbiological contamination of seafood. It supports both problem diagnosis and response initiatives. There are therefore important links between its work and the Regular Process;
Pro: Greater cooperation and collaboration among the international institutions with a role in ocean assessment and management is essential. If the relevant bodies are not engaged with the Regular Process they are unlikely to devote sufficient energy and commitment to making it work.
Contra: The more international bodies involved, the more unwieldy the MRB becomes and the more expensive the cost of its meetings.

5.51 On balance the Group of Experts recommends that all 13 organizations should be entitled to appoint representatives to the MRB.

Other MRB membership

5.52 The expert input of scientists (including social scientists) and other stakeholders will come through the mechanisms for expert assessment discussed below. As considered in Chapter 4, there are arguments for including additional stakeholders on the MRB to contribute to its functions. Five fields seem particularly relevant in this context:

- a. Expertise in conservation of nature
The International Union for Conservation of Nature (IUCN) brings together over 80 government members and some 100 additional government agency members together with over 900 NGO members, all active in conservation on land and in fresh and salt water. Another option in this category would be to include individual NGOs on a rotational basis.
- b. Expertise in the natural sciences
The Scientific Committee on Oceanic Research (SCOR) of the International Council for Science (ICSU) is the non-governmental forum linked to UNESCO for discussion of international ocean science policy issues and coordination of marine scientific research. ICSU comprises 114 national science bodies and 29 international scientific unions and is increasingly called upon to speak on behalf of the international science community and provide advice on science issues.
- c. Expertise in the economic and social sciences
The International Social Science Council (ISSC) is a parallel body to ICSU and the primary international body representing the social and behavioural sciences at the global level. Its members and associate members comprise international non-governmental bodies (associations or unions) on specific social science subjects; national social science bodies; national, regional and international governmental and non-governmental agencies; and foundations and organizations with major interests in the social sciences.
- d. Expertise in business and industry
Much business activity is focused on or affects the sea. As stakeholders in the Regular Process, industry representatives can contribute to the design, conduct and review of individual assessments and advise on social and economic aspects of specific industries. They can also assist in the analysis of response options. The emerging World Ocean Council (see footnote 2) or the many sectoral bodies (such as the International Association of Oil and Gas Producers or the International Fertilizer Industry Association) could identify potential MRB members.
- e. Expertise from indigenous peoples
Indigenous peoples from all regions of the world depend upon

the marine environment. Their rich and detailed traditional knowledge reflects and embodies a cultural and spiritual relationship with the land, ocean and wildlife. They meet together through various networks (e.g., IPACC (Indigenous Peoples of Africa Coordinating Committee); RAIPON (Russian Association of Indigenous Peoples of the North); and ICC (Inuit Circumpolar Council) and have varying roles within the international community (see Box 4.3 and Annex II, Arctic Climate Impact Assessment (ACIA)).

Pro: As representative of relevant professions, disciplines, sectors and civil society, these members can speak directly on the views and concerns of their constituencies with respect to assessment design and findings. They can also ensure that linkages are properly considered between the marine and other environments, among scientific disciplines and across sectors affecting the marine environment. They will be important in ensuring dialogue and interaction between their constituencies and the Regular Process, including follow-up to assessment findings.

Contra: The counter-argument to further expanding the membership of the MRB is, again, that a larger membership makes for unwieldy meetings and increases the costs.

- 5.53 Should it be decided that members such as those mentioned in para. 5.52 are to be appointed to the MRB, an appropriate process for selecting candidates would need to be developed. Perhaps the most practicable process would be for government members of the MRB to select members from short-lists of candidates put forward by the bodies concerned, in consultation with member states of the United Nations and regional groups.
- 5.54 On balance, the Group of Experts recommends that the MRB should include five additional members representing the interests described in para. 5.52 and appointed as set out in para. 5.53.

Recommendations for membership of the Management and Review Body

- 5.55 In summary, the recommendation of the Group of Experts is that there should be a Management and Review Body for the Regular Process, consisting of:

- a. 18–36 members appointed by the President of the UN General Assembly to represent member states, in consultation with member states and regional groups, ensuring an adequate range of expertise and on an equitable geographical basis, and providing for rotation of membership over time;
- b. 13 members, one each from DOALOS, FAO, IAEA, IBRD, IMO, UNESCO-IOC, ISA, CBD Secretariat, UNDP, UNEP, UNIDO, WHO and WMO;
- c. 5 further members selected on the basis of shortlists of candidates submitted by IUCN, ICSU-SCOR, ISSC, a body or bodies representing commercial interests in the oceans and a body or bodies representing indigenous peoples.

This body will require a smaller executive committee to perform routine management functions.

Options for a Panel of Experts for the Regular Process

- 5.56 The Regular Process will need a high level of expert input from a wide range of specialized fields. The Group of Experts considers a crucial part of the institutional arrangements for the Regular Process to be an Expert Panel that can arrange for expert input. Such a Panel must be composed of experts who are leaders in their own fields, have ability to work in an interdisciplinary way and are able to present complex material clearly for diverse audiences. It must be clear, however, that Panel members serve in an individual, expert capacity and do not *represent* any interests in a partisan or advocacy manner. Members may be drawn from any type of affiliation (e.g., government, NGO, IGO, the private sector, academic and research institutions, holders of traditional knowledge).
- 5.57 The Expert Panel's functions can be formulated as follows:
 - a. To undertake assessments;
 - b. To draft detailed terms of reference (as necessary) and related implementation plans, budgets and communications strategies for each individual assessment under the Regular Process for approval by the MRB;
 - c. To approve the reports and conclusions for each individual assessment under the Regular Process;
 - d. To advise the MRB on proposals for individual assessments under the Regular Process and on other matters as requested;

- e. To identify, develop and recommend methods, approaches and standards for data collection and analysis and for assessment of the marine environment;
 - f. To select experts for membership in the Panel, subject to confirmation by the MRB, and for individual assessment teams under the Regular Process; and
 - g. To promote networking among marine assessment processes and individual experts.
- 5.58 The composition of the Panel should reflect geographic and gender balance, ensure a mix of disciplinary expertise and involve participants from all regions in order to take into account different regional circumstances and experience. All the main disciplines in the natural and social sciences, including policy and law and traditional knowledge should be considered for inclusion.
- 5.59 There are two main options to discharge the functions of the Expert Panel:
- a. To create a new Expert Panel of, say, 20 members;
 - b. To employ the existing Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), comprised of 25–30 members, subject to any modifications needed in the mandate, composition and institutional arrangements of GESAMP.
- 5.60 The arguments for and against these alternatives can be summarized as follows:
- A New Expert Panel:** A new Panel would take some time to establish and organize and to develop a reputation. As another expert body specialized in the marine environment, it could lead to competition with GESAMP over scarce financial resources. On the other hand, a new Panel would be tailored to meet the needs of the Regular Process, including its objective and scope.
- GESAMP:** GESAMP is an existing body with an established reputation for the credibility and quality of its outputs which to date have focused on the natural sciences. Its mandate would have to be extended to include the functions proposed for the Expert Panel. However, the more critical difficulties that need to be considered are the management and reporting structure of GESAMP:

- a. GESAMP's management structure¹³ does not fit easily with the proposed MRB structure, which envisages membership by states and other stakeholder organizations in addition to intergovernmental agencies. On the other hand, if the Expert Panel reported directly to the UN General Assembly through an *ad hoc* meeting able to devote sufficient time to defining the objectives and scope of proposed assessments and to considering assessment reports and findings, as considered in para. 5.36(b), there is the alternative of leaving the more routine "management" functions included in para. 5.41 to GESAMP's existing inter-agency Executive Board and Executive Committee, possibly with an expanded membership of intergovernmental bodies.
- b. GESAMP presently reports to all its sponsoring organizations. It would be necessary to specify additional reporting arrangements for GESAMP in respect of the functions of the Regular Process, in accordance with the reporting procedures agreed for the Regular Process.

Recommendations on the Panel of Experts

- 5.61 On balance, the Group of Experts considers that the needs of the Regular Process will be better served by establishing a new Expert Panel.
- 5.62 For a new Expert Panel, it will be necessary to develop the procedures, profile and criteria for selection of the experts, such as that used to select the AoA Group of Experts (see Annex III). The appointments could be made by the MRB for a period of five years in the first instance (on the assumption that the proposal for a five-year initial cycle is adopted). Thereafter members would be selected by the Expert Panel, subject to confirmation by the MRB. Following the first cycle, a periodic partial renewal should take

¹³ GESAMP is sponsored jointly by IMO, FAO, UNESCO-IOC, WMO, IAEA, UNIDO, the UN, and UNEP. It is open to sponsorship by any UN organization, agency, fund or programme, each of which appoints a Technical Secretary. The Technical Secretaries together with the Administrative Secretary nominated by IMO form the Executive Board, which develops the budget and work plan and selects the Chair and Vice-Chair of GESAMP. The Executive Board together with the Chair and Vice-Chair form the Executive Committee, which selects and appoints the members of GESAMP and monitors and reports on its activities. The Administrative Secretary, based at the office in IMO, supervises general coordination and support to the Executive Committee, the Group itself and its working groups. GESAMP members collectively provide overall scientific guidance, perspective and oversight, including the review and approval of reports before publication. Reports are prepared by *ad hoc* working groups which are constituted from members of GESAMP and its Pool of Experts.

place, so that terms are staggered to ensure a mix of continuity and fresh ideas. As part of the arrangements to ensure turnover, Expert Panel members should serve terms of no more than three to five years and membership should be limited to two consecutive terms.

- 5.63 Whichever option is chosen, the Group of Experts stresses that all members of the Expert Panel – whether experts from the private sector, government, academic and research institutions or another affiliation – will require substantial amounts of dedicated time to devote to the work of the Regular Process.

Options for a Pool of Experts for the Regular Process

- 5.64 In addition to the Expert Panel, there is likely to be a need to establish a Pool of Experts from which to draw additional experts as necessary:
- a. For individual assessments under the Regular Process when Panel experts do not have sufficient time or when additional fields of expertise are needed;
 - b. As external peer reviewers for the products of the Regular Process (that is, external reviewers who have not participated in the development of the products they review);
 - c. As a resource for the development and execution of capacity-building initiatives.
- 5.65 Three main options can be identified for establishing such a Pool:
- a. The MRB could establish a specific Pool of Experts for the Regular Process. To cover the necessary expertise in relation to regions, disciplines and other criteria, the Pool would need to contain a substantial number of experts. In response to a periodic open call for experts, nominations would be accepted from all stakeholder groups, including governments, IGOs, international scientific organizations, NGOs, industry and professional associations, holders of traditional knowledge and members of the Panel. Nominations would have to be based on an agreed profile and selection criteria (see para. 5.68). The Secretariat would review the nominations, based on the profile and criteria, and submit a list of candidates to the Expert Panel for their consideration. The Expert Panel would forward its selection to the MRB for final approval. To ensure turnover, appointments to the Pool would remain valid for a specified number of years.

Pro: This would help ensure a source of additional expertise for the Panel as needed. Those appointed to the Pool would also be drawn into the work of the Regular Process and would thus, to some extent, become its ambassadors;

Contra: An ongoing commitment of resources would be required in order to maintain the Pool and might well result in the appointment of some experts whose services would never be needed. There would also be a continuing risk that the established Pool would not contain the type of expert required for some specific purpose;

- b. Experts could be appointed on a case-by-case basis. When a specific need was established, the Secretariat would invite governments and relevant stakeholder organizations to propose experts who would then be reviewed in the same manner as under (a), for decision by the MRB (or perhaps by the Co-Chairs of the Expert Panel, acting under delegated powers).

Pro: This would reduce substantially the initial work – all that would be needed would be the list of organizations that would be invited to propose experts (in addition to Expert Panel members). It would also make it more likely that the individuals proposed would match the expertise needed for any particular assessment. In addition, groups with specialized interests could be confident that they would have the opportunity to propose experts for issues of interest to them.

Contra: It is possible that this nomination and selection process could delay a particular activity where additional experts are needed, but for most assessments, the time between agreement on a topic and developing more detailed terms of reference, securing funding and commencing work would be sufficient to solicit and review proposals for relevant experts and agree on a list;

- c. Experts could be drawn from suitable existing lists. For example, GESAMP already maintains a pool of experts to provide inputs to its working groups. Similar lists of experts exist for marine-related projects such as Land-Ocean Interaction in the Coastal Zone (LOICZ), sponsored jointly by the International Geosphere-Biosphere Programme (IGBP) and the International Human Dimensions Programme (IHDP). The Secretariat could identify a list of candidates from these existing lists for review by the Panel and approval by the MRB (or perhaps by the Co-Chairs of the Panel).

Pro: This would avoid the Regular Process duplicating the work of other expert bodies in drawing up lists of experts and would ensure a reasonably rapid response to meet identified needs;

Contra: There would still be a risk that some needs could not be covered from the lists drawn up by others, as these lists are based on the mandates and needs of the organizations involved.

- 5.66 A supplemental nomination process that could be contemplated under all three options is self-nomination by experts who wished to contribute to assessments undertaken by the Regular Process. They would be subject to the same criteria and selection process as other experts. For example, the International Council for Exploration of the Sea (ICES) and GESAMP already provide for self-nomination of experts (see para. 4.46).

Recommendations on the Pool of Experts

- 5.67 On balance, the Group of Experts considers that the first option is the most promising but would need to be supplemented, whenever necessary, by case-by-case appointments as in the second option. Self-nomination by experts should be provided for.

Options for Secretariat support of the Regular Process

- 5.68 The MRB and the Expert Panel will need strong secretariat support. The Group of Experts identified seven main functions of a Secretariat:
- a. To support the work of the MRB and Expert Panel by organizing meetings and providing administrative and substantive support for their meetings and other work;¹⁴
 - b. To identify, acquire, coordinate and manage information (primarily information shared with other processes) for consideration by the Expert Panel, and to run a system to manage data, tools, resources and documents to support the experts' work;
 - c. To organize and coordinate the peer review process for products of the Regular Process;
 - d. To prepare an annual report to be submitted to the UN General Assembly in accordance with the mandate of the Regular Process, and to the different UN bodies and other organizations that sponsor members of the MRB;

- e. To develop and maintain interactions with existing regional and global assessment processes, expert networks and other partners;
- f. To organize and coordinate public information and outreach activities of the Regular Process, including editorial work and the release of reports and other products;
- g. To serve as a focal point to promote and facilitate capacity building that supports the objectives of the Regular Process;
- h. To develop the programme and budget of the Regular Process and manage and report on related funds/trust funds; and
- i. To help mobilize financial resources to support the Regular Process in addition to those provided by governments as envisaged in para. 5.80.

5.69 While there is a theoretical option of establishing an independent Secretariat, the Group of Experts considers that the Regular Process will benefit substantially if it is hosted within the United Nations structure in a body or bodies with experience in managing a scientific process, appropriate links to relevant expert communities and stakeholders and competence to enter into agreements with potential partners and collaborating institutions. Moreover, it will be more cost-effective if the Secretariat can draw on existing facilities and services and benefit from the standing and continuity of an established body or bodies.

5.70 Against this background, the following three options are presented, although a variety of combinations could be envisaged:

- a. Hosting the Secretariat within a single intergovernmental organization,
- b. Establishing an inter-agency Secretariat co-located in one intergovernmental organization,¹⁵ and
- c. Distributing the Secretariat among several intergovernmental organizations.

5.71 The arguments for and against these alternatives can be summarized as follows:

The first option has the advantage of a single focus of responsibility and accountability but does not involve other international

¹⁵ For example, WMO hosts the secretariat of the IPCC, and WMO and UNEP provide, respectively, its Secretary and Deputy Secretary.

organizations directly and may undermine a feeling of “ownership” on the part of the other intergovernmental bodies associated with the Regular Process. The second and third options have the advantage of drawing on the skills and comparative advantages of different organizations and gaining wider institutional support and “ownership”. Option (b) concentrates expertise and support in one location and is likely to encourage coordination and synergy among the agencies. Such coordination and synergy might be more difficult to achieve under (c). At the same time, option (b) may diminish interaction of Secretariat staff with their parent agency depending on the location selected.

Recommendations on the Secretariat for the Regular Process

- 5.72 On balance, the Group of Experts considers that there is advantage in a co-located, inter-agency Secretariat. It will be important to identify distinct functions for each agency, reducing the likelihood of duplication or confusion over their respective roles; for example, the distinct functions of DOALOS, which is responsible for providing substantive services for processes like the ICP or *ad hoc* meetings established by the UN General Assembly.

Focal Points to promote interaction and collaboration with the Regular Process

- 5.73 Paragraphs 5.19–5.23 stress the importance of networking among those involved in assessment processes. But before members of a network can communicate, they need to know who the other nodes of the network are and how to contact them. It will be particularly important that there is effective networking among:
- a. The members of the Regular Process’s Management and Review Body, the Expert Panel and the Secretariat;
 - b. Global intergovernmental organizations and other relevant global organizations;
 - c. Regional seas organizations, regional fisheries bodies, regional marine-science bodies and other relevant regional organizations;
 - d. National bodies engaged in marine monitoring, assessment and research; and
 - e. Components of civil society and the private sector interested in the state of the oceans.

- 5.74 When implementing the Regular Process, governments and agencies will need to identify focal points within their organizations who can act as interlocutors with the other members of this proposed network. In the same way, global and regional international organizations, at governing body level and/or at secretariat level, as appropriate, will need to accept an obligation to establish focal points. Those components of civil society and the private sector who wish to be involved will equally need to identify focal points.
- 5.75 These focal points need to be more than recipients of information. They need to interact in three complementary directions. First, they need to have sufficient status and resources within their own organization (and for national bodies, among all the relevant national bodies) to be able to coordinate, liaise or interact with other relevant parts of their own organization or national government so that they can respond fully to enquiries and requests from, and interact effectively with, other parts of the network. Secondly, they need to communicate with the central units of the Regular Process. And thirdly, they need to communicate within their region with both regional bodies and national organizations. This multi-directional communication is essential to support fully integrated assessments.

Recommendations on Focal Points

- 5.76 The Group of Experts recommends that governments and relevant organizations identify focal points for the Regular Process and provide them with sufficient status and resources to interact effectively with the Regular Process, with relevant elements of their own organization and with other organizations within their region in order to improve marine assessment.

OPTIONS FOR FINANCING THE REGULAR PROCESS

- 5.77 The first issue in addressing financing options is to consider what main expenditures it would be necessary to cover.
- 5.78 The Appendix to this Chapter (Implementing the Regular Process – Actions and Exemplifications of Cost) gives an initial overview of the possible cost implications of the expert, management and support services discussed in this Chapter.

- 5.79 The way in which resources for the Regular Process would be provided will depend very largely on the decisions taken on institutional arrangements. For example, if a single agency is the host for the Secretariat, what is needed will be very different from what would be needed if the Secretariat function is shared between several agencies.
- 5.80 Rather than anticipating these decisions and attempting to work out a single financial mechanism, therefore, the Group of Experts has identified the factors which should shape the mechanism. The mechanism should:
- a. Recognize that the creation of the Regular Process will require the provision of resources by member states through the United Nations, its specialized agencies and/or other global intergovernmental organizations;
 - b. Ensure that, irrespective of the way in which resources are provided, the United Nations and each of the participating global intergovernmental organizations have a sense of "ownership" of the Regular Process as a whole;
 - c. Settle financing for the whole of each cycle of the Regular Process as early as possible in that cycle, so that there is a stable base for operations;
 - d. Ensure that there is a clear budget for the Regular Process (either as an independent budget or as an identified part of a larger budget) which demonstrates that the agreed needs and the resources provided to meet them are in balance;
 - e. Have a clear central focus for management and accountability, so that governments and other stakeholders can easily monitor the financial aspects of the Regular Process.
- 5.81 The overall direct resource needs for the first five-year cycle of the Regular Process, based on these overall indications of cost, would average between US\$ 4 million and US\$ 5.6 million a year, or between US\$ 20 million and US\$ 28 million for the full cycle. Any additional costs of capacity building would have to be calculated in light of an evaluation of needs and of what can be delivered by organizations already active in this area. In addition, there would be costs for states which support directly participants in the UN forum, the Management and Review Body and/or the Expert Panel.

Appendix to Chapter 5: Implementing the First Cycle of the Regular Process

ACTIONS AND EXEMPLIFICATIONS OF COSTS

1. This Appendix has been prepared to provide a focus on the levels of cost implied if the Regular Process were developed along the general lines set out in this report. It cannot be precise, since many options are discussed in the report and it would be impossible to describe the financial implications of them all.
2. The Appendix therefore sets out, at a general level, one possible pattern of actions to implement the first cycle of the Regular Process in the years 2010–2014, as described in paras. 5.24–5.28. Many other patterns are possible. This is not a developed proposal and the cost figures mentioned are not estimates – they are overall indications of the orders of magnitude that might be needed. This material should therefore be considered as a set of points for further consideration.
3. However, one point that should be stressed is the way in which the Regular Process can add substantial value to the expenditures which are already being undertaken in monitoring and assessing the oceans and seas.
4. Estimates of current annual expenditures by governments on existing arrangements (at national, regional and global levels) for monitoring and assessing the state of the marine environment¹⁶ approximate several tens of billions of (US) dollars.¹⁷ In addition, there is probably at least as much expenditure by commercial organizations (both for their own purposes and as a result of government requirements) and voluntary organizations.

¹⁶ Including fisheries, shipping, mariculture, offshore oil and gas installations, other seabed activities (such as aggregate dredging), land-based sources of pollution, tourism, dumping, invasive species, marine debris, habitat assessment (such as coral reefs), biodiversity and effects of climate change.

¹⁷ The United States of America is reported to be spending US\$ 600 million a year on ocean science (US Commission 2004). In the fisheries field alone, the Australian Fisheries Management Authority spent over AU\$ 5 million on research and data in 2007/8 (AFMA 2007). Ireland is reported to have spent US\$ 13.3 million in 1998 on research and development, promotion of international activities and cooperation, policy advice, data collection and analysis; New Zealand US\$ 14 million in 1997/8 on fisheries policy advice, stock assessment, research and development; and Norway US\$ 28.1 million in 1998 on fisheries research (Pascoe and others 2002).

5. The Regular Process offers an opportunity – for a very modest further investment – to get a much better return on these substantial expenditures in three respects: it would
 - a. Give decision-makers a more complete global picture of environmental, economic and social aspects of the oceans to support future policy making;
 - b. By placing all the other marine assessment work within the context of fully integrated global and regional marine assessments, help other organizations to relate their specialized regional, sectoral or thematic work to a more integrated assessment and to the work carried out at larger or smaller geographic scales; and
 - c. By producing a much clearer picture of marine assessment activities worldwide, including social and economic aspects, help organizations active in the field to concentrate their activities, including capacity building, more precisely.

Setting up the institutional arrangements for the Regular Process

6. Of the six institutional elements for the Regular Process proposed in this report:
 - a. ***The UN forum*** (see paras. 5.32–5.37)

This forum (through which UN member states provide input on the development of an assessment, examine its findings and ultimately evaluate the process and its products (see paras. 5.14(d) and 5.34(c)) would be needed at the end of the first cycle. If the option of the Informal Consultative Process (ICP) were selected, any additional costs are likely to be minimal. If the second option were selected, the costs would be on the same order as those for the one week meeting of the *ad hoc* working group of the whole of the UN General Assembly which is to consider this report. This forum could meet at the end of each cycle to prepare advice on the results of that cycle for the UN General Assembly, together with suggestions for adjustments in the products from, and in the process for, the next cycle. The “package” cost of a one-week meeting at the United Nations, including documentation, translation, interpretation and security is approximately US\$ 300,000.

- b. ***The Management and Review Body*** (MRB) (see paras. 5.38–5.55)
This body would need to meet soon after the UN General Assembly establishes the form of operations of the Regular Process in order to elaborate on the decisions of the General Assembly and to establish procedures and other working arrangements, including budgets. It would then need to meet yearly, with probably two meetings in the last year of the first cycle to enable the MRB to comment on the products of the Expert Panel. Its costs are likely to be on the same order as the Ad Hoc Steering Group (AHSG) for the Assessment of Assessments, but possibly increased to allow for a larger membership. The costs of the AHSG have been around US\$ 75,000 for each meeting, so using an estimate of US\$ 100,000 per meeting for a larger membership, the total cost for six meetings in the first cycle would be about US\$ 600,000.
- c. ***The Expert Panel*** (see paras. 5.56–5.63)
Setting up the Expert Panel will need to be carried out as soon as the MRB has agreed the details of the procedure. The Panel will need to hold its first meeting within six months or so of the decisions of the UN General Assembly on the Regular Process. Although much work can be done electronically – as this Group of Experts has demonstrated – face-to-face meetings are essential. The Expert Panel would need to meet at least twice a year. Its costs would be substantially higher than those of this Group of Experts, since more support to members would be needed. Expert Panel members will need to devote a substantial part of their working time to the Regular Process – possibly 25%–30%. In some cases their employers may be prepared to support them for this work. In many cases, however, the Regular Process will have to provide direct support. The AoA Group of Experts has cost about US\$ 100,000 for each meeting, without substantial provision for support to the experts. The Expert Panel would therefore be likely to cost at least US\$ 750,000 a year. Over a five-year cycle, an indication of the order of cost is therefore between US\$ 3.75 million and US\$ 4 million.
- d. ***The Secretariat*** (see paras. 5.68–5.72)
An initial core of the Secretariat will be needed immediately after the UN General Assembly's decisions on the Regular Process, in order to arrange the first meeting of the MRB and

to put in hand arrangements for the appointment of the Expert Panel. This initial core might be provided by secondments from the international organizations who will participate in the Regular Process, pending permanent recruitment and appointments. It seems likely that over the course of the first cycle of the Regular Process, the Secretariat would need to build up to a strength of around 8–10 professional staff and an equal number of support staff. Costs will depend substantially on the exact organizational structure adopted. However, as an example, the OSPAR Secretariat (which has 5 professional staff and 7 support staff) costs about US\$ 1.5 million a year, including salaries, accommodation, information technology, travel, translation and overheads. The costs of a Secretariat twice this size for the Regular Process could therefore rise to the order of US\$ 3 million a year. As a further comparison, the standard staff costs at UN Headquarters for 10 professionals (Grade P3) and 10 support staff (GS4) would be US\$ 1.88 million, to which operational costs would need to be added. An indication of the order of costs over a five-year cycle is therefore between US\$ 10 million and US\$ 15 million. The publication of a major report and related outreach activities in each cycle would need to be considered separately and could cost (including translation into the UN working languages) as much as US\$ 400,000.

e. ***Additional Expert Advice*** (see paras. 5.64–5.67)

Substantial work will be needed to support the workshops used to develop the preliminary assessment products noted below and to provide for assembling the necessary knowledge. Some of this would be done by the Secretariat, but some will require specialist skills that the Secretariat cannot offer, including the ability to work with information only available in languages not shared by the Secretariat. The costs are likely to be on the order of US\$ 1,500 a day (including remuneration, travel and other expenses and overheads). In light of what is said below on the workshops, as many as 400 person-days a year could be needed, giving an indication of costs of at least US\$ 600,000 a year. Over five years, an indication of the order of cost is therefore from US\$ 3 million to US\$ 3.5 million.

- f. **Focal Points** (see paras. 5.73–5.76)
 These do not seem to have any cost implications for the Regular Process itself, although they will require resources in the organizations which set them up. The work of the Secretariat will need to include arrangements to keep focal points aware of what is going on.

Fundamental building blocks for the Regular Process

7. There need to be four continuing fundamental building blocks for the Regular Process (see paras. 5.17–5.23). The work on three of these will be carried out substantially by the Secretariat (capacity building – analysis of needs and facilitating arrangements with partners; networking; communications). The costs of this work would therefore be covered under para. 6(d) above. The work on the fourth (improve methods of analysis) will be carried out substantially by the Expert Panel, with supplemental expertise as needed. This work would therefore be covered under para. 6(c) above with possible additional costs for other experts covered under para. 6(e). Other needs may emerge in the course of the production of assessment products. For example, it is clear that additional expenditures will be needed on capacity building, but this cannot be judged until an evaluation has been made of what can be delivered by the organizations already active in this field. It is therefore generally not possible to indicate what further costs might be involved for the four activities, although it is likely that supplementary expenditures will be needed.
8. One element will clearly require some additional expenditure, which can now be estimated. This is the need for a portal to give all concerned ready access to the assessment products already produced, or to be produced in future, by existing assessment processes. The UNEP World Conservation Monitoring Centre has already produced a database of such assessments, in which much of the detailed work of the AoA Group of Experts has been stored (see Box 3.1). It is an essential guide to what is available. It could be developed into a portal leading to the material wherever it is currently stored. The cost of merely maintaining this database would be around US\$ 50,000 a year. Improving it into a portal and then maintaining it might increase the cost to around US\$ 100,000 a year. Therefore the range of costs over five years is from US\$ 250,000 to US\$ 500,000.

Preliminary assessment products needed in the first cycle of the Regular Process

9. In the early years of the first cycle of the Regular Process, the strategy and timetable for the production of the integrated assessment in the later part of the cycle will need to be developed (see para. 5.26). Likewise, before the end of the first cycle, arrangements will need to be agreed for the eventual evaluation of the assessment and the process that produced it.
10. In addition, the proposed preliminary assessment products needed in the early years of the first cycle (see para. 5.27) cover:
 - a. A set of common questions and issues to be addressed (in differing degrees of elaboration) across all the regions;
 - b. Agreed assessment methods for the datasets in different scientific fields;
 - c. An agreed approach to evaluating the risks that are identified;
 - d. A common framework and guidelines for data assembly.
 - e. An agreed approach for integrating the data and information and analytical results across sectors, ecosystem components and economic, environmental and social aspects;
 - f. Methods to process digitally the available data, including the methodologies for quality assurance, modelling and the metadata that should eventually be assembled,
11. These six preliminary products involve collaboration with a number of existing assessment processes, both at global and regional levels. An effective way of achieving this involvement would be to arrange three to four workshops on one or more of these themes around the world, in order to bring together experts involved in the assessment processes of several regions. For example, it could be envisaged that a workshop could be held to examine and prepare initial surveys and thinking on (a) – (f) for the regions of the Atlantic and Caribbean, or for the regions of the Indian Ocean. There would also be a need for workshops at the global level to integrate the output of the regional workshops.
12. Each of these workshops would require an initial meeting, to be followed by a period of further contact between the members and a final meeting to agree the final input to a global workshop or direct to the Expert Panel. This would imply a total of 10–15 workshops (allowing for the fact that more than one assessment product

could be considered in a single workshop). Each such workshop (including costs of support for those attending from developing countries) could cost something of the order of US\$ 150,000 to US\$ 200,000.

13. Over the first cycle of the Regular Process, it might therefore be necessary to make provision for expenditure on the order of US\$ 1.5 million to US\$ 3 million to produce the products identified in paras. 9(a)–9(f).

Evaluation

14. Finally, provision must be made for the evaluation of the first cycle of the Regular Process, both *products* and *process* (see paras. 5.14(d) and 5.34(c)). This would entail a mid-term review as well as a full evaluation team at the end of the five-year cycle. Both would involve *internal* members from among the experts and users involved in the assessment and *external* members who have not been involved in the Regular Process in any way. The mid-term review could involve 2–3 individuals, while the full post-cycle evaluation could involve a team of six members, three internal (2 experts and 1 user) and three external (one a user). While the costs of the internal experts are included in the expert costs under paras. 6(c) and 6(e), the costs of the other four (users and external team members) would have to be funded. An order of magnitude of the cost (on the same basis as for the pool of experts) for the mid-term review and final evaluation is US\$ 300,000. This includes the cost of one of the external reviewers who, in addition to working with the team, would be expected to monitor developments throughout the course of the assessment.

Overall resource needs

15. The overall direct resource needs for the first five-year cycle of the Regular Process, based on these overall indications of cost, would average between US\$ 4 million and US\$ 5.6 million a year, or between US\$ 20 million and US\$ 28 million for the full cycle. Any additional costs of capacity building would have to be calculated in light of an evaluation of needs and of what can be delivered by organizations already active in this area. In addition, there would be costs for states which support directly participants in the UN forum, the Management and Review Body and/or the Expert Panel.

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