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Consideration of the modalities and institutional arrangements for an intergovernmental science-policy platform on biodiversity and ecosystem services: work programme of the platform

# Possible elements of the work programme of the platform

# Note by the secretariat

To support discussion on the work programme at the second session of the plenary, representatives at the first session established an intersessional process to allow Governments and other stakeholders the opportunity to comment further on the possible functions of a work programme in advance of the second session, and for those comments to be incorporated into updated documentation on the work programme for the second session of the plenary. As a result a revised document on the draft elements of the work programme was made available on 31 October 2011 and comments requested by 15 December 2011. A copy of the review draft of the document and all comments received on the document are available on the platform's website at the address www.ipbes.net/plenary-sessions/intersessional-process.html.

The current document is the result of the intersessional process, taking full account of the comments provided by Governments and other stakeholders.

\* UNEP/IPBES.MI/2/1.

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# I. Context and guiding principles

1. Through the Busan outcome, adopted at the third ad hoc intergovernmental and multi-stakeholder meeting on an intergovernmental science-policy platform on biodiversity and ecosystem services, held in Busan, Republic of Korea, from 7 to 11 June 2010,<sup>1</sup> representatives of Governments set out some overarching guidance relating to the work programme of the platform. By subparagraph 6 (a) of the Busan outcome, it was agreed that the work programme of the platform would be responsive to requests from Governments and based on priorities established by the plenary. Specifically it was agreed that:

(a) Focusing on government needs and based on priorities established by the plenary, the platform should respond to requests from Governments, including those conveyed to it by multilateral environmental agreements related to biodiversity and ecosystem services as determined by their respective governing bodies. The plenary should welcome inputs and suggestions from, and the participation of, United Nations bodies related to biodiversity and ecosystem services as determined by their respective governing bodies. The plenary should also encourage and take into account, as appropriate, inputs and suggestions made by relevant stakeholders, such as other intergovernmental organizations, international and regional scientific organizations, environment trust funds, non-governmental organizations and the private sector. To facilitate this, and to ensure that the platform's work programme is focused and efficient, a process to receive and prioritize requests should be established by the plenary;

2. By subparagraphs 6 (b)–(e) of the Busan outcome, agreement was reached on four overarching functions related to the work programme of the platform. These subparagraphs state as follows:

(b) The new platform should identify and prioritize key scientific information needed for policymakers at appropriate scales and catalyse efforts to generate new knowledge by engaging in dialogue with key scientific organizations, policymakers and funding organizations, but should not directly undertake new research;

(c) The new platform should perform regular and timely assessments of knowledge on biodiversity and ecosystem services and their interlinkages, which should include comprehensive global, regional and, as necessary, subregional assessments and thematic issues at appropriate scales and new topics identified by science and as decided upon by the plenary. These assessments must be scientifically credible, independent and peer-reviewed, and must identify uncertainties. There should be a clear and transparent process for sharing and incorporating relevant data. The new platform should maintain a catalogue of relevant assessments, identify the need for regional and subregional assessments and help to catalyse support for subregional and national assessments, as appropriate;

(d) The new platform should support policy formulation and implementation by identifying policy-relevant tools and methodologies, such as those arising from assessments, to enable decision makers to gain access to those tools and methodologies, and, where necessary, to promote and catalyse their further development;

(e) The new platform should prioritize key capacity-building needs to improve the science-policy interface at appropriate levels and then provide and call for financial and other support for the highest-priority needs related directly to its activities, as decided by the plenary, and catalyse financing for such capacity-building activities by providing a forum with conventional and potential sources of funding;

3. In paragraph 7 of the Busan outcome, a number of principles are identified which are intended to guide the work of the platform, both in terms of the content of the work programme and the manner in which is it delivered. In particular:

(a) Collaborate with existing initiatives on biodiversity and ecosystem services ... to fill gaps and build upon their work while avoiding duplication;

(b) Be scientifically independent and ensure credibility, relevance and legitimacy through the peer review of its work and transparency in its decision-making;

(c) Use clear, transparent and scientifically credible processes for the exchange, sharing and use of data, information and technologies from all relevant sources, including non-peer reviewed literature, as appropriate;

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Annex to the report of the meeting (UNEP/IPBES/3/3) – see reference 11.

(d) Recognize and respect the contribution of indigenous and local knowledge to the conservation and sustainable use of biodiversity and ecosystems;

(e) Provide policy-relevant information, but not policy-prescriptive advice, mindful of the respective mandates of the multilateral environmental agreements;

(f) Integrate capacity-building into all relevant aspects of its work according to priorities identified by the plenary;

(g) Recognize the unique biodiversity and scientific knowledge thereof within and among regions, and also recognize the need for the full and effective participation of developing countries and for balanced regional representation and participation in its structure and work;

(h) Take an interdisciplinary and multidisciplinary approach that incorporates all relevant disciplines, including social and natural sciences;

(i) Recognize the need for gender equity in all relevant aspects of its work;

(j) Address terrestrial, marine and inland water biodiversity and ecosystem services and their interactions;

(k) Ensure the full use of national, subregional and regional assessments and knowledge, as appropriate.

4. The integral nature of the relationships between these work programme functions is also recognized in paragraph 7 of the Busan outcome, in which it is agreed that the platform should, among other things, integrate capacity-building into all relevant aspects of its work according to priorities decided by the plenary. Other clear relationships between the platform's agreed functions include the role of assessments in identifying gaps in knowledge, the importance of facilitating knowledge generation for informing future assessments, and the role of assessments as tools for policy support and in reviewing the potential value of policy-relevant tools and methodologies to decision makers. This is considered in further detail below.

5. In preparation for the first session of the plenary meeting to determine modalities and institutional arrangements for an intergovernmental science-policy platform on biodiversity and ecosystem services, held in Nairobi, Kenya, from 3 to 7 October 2011, the secretariat prepared one working document<sup>2</sup> and four information documents<sup>3</sup> on the work programme. These were prepared in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Development Programme (UNDP), the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and the Food and Agriculture Organization of the United Nations (FAO). They were supported by additional information documents submitted by Governments and scientific organizations reporting on independent expert workshops on issues relevant to the programmatic functions of the platform,<sup>4</sup> and also by the gap analysis<sup>5</sup> and other information documents submitted at the earlier intergovernmental and multi-stakeholder meetings.<sup>6</sup>

6. At the first session of the plenary there was a preliminary sharing of ideas on possible functions of an initial work programme of the platform. In addition to various specific suggestions on the individual functions of the platform, there was a general recognition that the four functions of the platform should be delivered in an integrated manner through the work programme. Further contributions to the discussion were made by organizations present at the meeting, including one speaking on behalf of the six global biodiversity-related conventions.<sup>7</sup>

6 See references 10, 12, 13, 14, 15 and 16.

7 Convention on Biological Diversity, Convention on the Conservation of Migratory Species of Wild Animals, Convention on International Trade in Endangered Species of Wild Fauna and Flora, International Treaty on Plant Genetic Resources for Food and Agriculture, Ramsar Convention on Wetlands, and World Heritage Convention.

<sup>2</sup> Note by the secretariat on a possible work programme of the platform (UNEP/IPBES.MI/1/7) – see reference 1.

<sup>3</sup> Notes by the secretariat on options for the work programme of the platform on knowledge generation, assessments, policy support and capacity-building (UNEP/IPBES.MI/1/INF/3/Add.1, INF/4/Add.1, INF/5/Add.1 and INF/6/Add.1, respectively) – see references 2–5.

<sup>4</sup> See references 6, 7 and 8.

<sup>5</sup> Gap analysis for the purpose of facilitating the discussions on how to improve and strengthen the science-policy interface on biodiversity and ecosystem services (UNEP/IPBES/2/INF/1) – see reference 9.

7. To support discussion on the work programme at the second session of the plenary, representatives at the first session established an intersessional process to allow Governments and other stakeholders the opportunity to comment further on the possible functions of a work programme in advance of the second session, and for those comments to be incorporated into updated documentation on the work programme for the second session of the plenary. As a result a revised document on the draft elements of the work programme was made available on 31 October 2011 and comments requested by 15 December 2011. A copy of the review draft of the document and all comments received on the document are available on the platform's website at the address www.ipbes.net/plenary-sessions/intersessional-process.html.

8. The current document is the result of the intersessional process, taking full account of the comments provided by Governments and other stakeholders. Following this introductory section on context and guiding principles, there are two substantive sections:

(a) Chapter II is concerned with additional considerations that need to be taken into account when developing and implementing the platform's work programme;

(b) Chapter III focuses on the possible elements of a future work programme, identifying how the work programme functions relate to one another and suggesting a number of potential activities that could provide the basis for developing the programme.

9. Finally, chapter IV contains annotated references, providing a useful summary list of the documents relevant to the platform's work programme.

10. It is anticipated that this working document will be further supported by one or more information documents available at the second session, which further illustrate how the work programme might be implemented. These information documents would also be based on inputs made by Governments, in particular during the intersessional process.

11. In addition, the working document on the budget, prepared for the second session,<sup>8</sup> provides indicative costs associated with the potential activities considered in the current document.

# II. Additional considerations

12. There are a number of additional considerations that need to be taken into account when developing and implementing the platform's work programme. These are presented in advance of the work programme options as they may help to frame consideration of the options presented. These considerations are mainly concerned with helping to ensure that the platform adds value. It should be noted that a number of these considerations may also require the development of additional elements for agreement by the plenary prior to, or at an early stage in, the implementation of the work programme.

## A. Considerations relating to determining the work programme

#### 1. Requests made to plenary

13. The work programme will be determined by the plenary, based on requests that it receives. In the initial exchange of views on the work programme that took place in Nairobi, and in comments submitted during the intersessional process, there were interventions on such issues as the necessity of alignment with the needs of multilateral environmental agreements (and where possible the integrated needs of several such agreements), the urgency of considering knowledge necessary to implement the Aichi targets,<sup>9</sup> the importance of focusing on measures to tackle biodiversity loss, and the urgent need for an in-depth assessment on ecosystem restoration. As agreed in the Busan outcome, the platform needs to respond to the requests made to the plenary, and the process by which requests are received and initially reviewed will need to be determined. The current document therefore outlines a framework for response once agreement is reached on those needs and priorities.

#### 2. Setting priorities

14. It will be important to identify a process by which the plenary will determine short, medium and long-term priorities in the work programme from the variety of requests submitted, and associated timetables. While some potential priorities have been indicated in the present note, Governments and other stakeholders will need to confirm these and identify others during further discussion on the work

<sup>8</sup> Note by the secretariat on indicative budget requirements for the administration and implementation of an intergovernmental science-policy platform on biodiversity and ecosystem services (UNEP/IPBES.MI/2/7).

<sup>9</sup> Decision X/2 of the Conference of the Parties to the Convention on Biological Diversity, on the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets (see reference 17).

programme, without prejudice to the prioritization of the work programme by a future plenary meeting of the platform.

#### 3. Screening of requests made to plenary

15. The plenary's decision on how to deal with a request is likely to be informed by some form of screening process. In order to take informed decisions on the selection of requests and their implications in terms of the work programme, there is a need for some sort of general scoping exercise of requests prior to a plenary meeting, providing general advice to the plenary on resource requirements (such as budget and timelines) and on the general approach that might be taken by the platform, including advice on potential fast-track assessments to meet urgent needs. This process will also allow links to be made between different requests, where appropriate, and will clearly benefit from engagement with a range of stakeholders, including the scientific community.

## B. Considerations relating to implementing the work programme

#### 1. Meeting multiple needs

16. While decisions on the future work programme and the manner in which it is conducted are the prerogative of a future plenary meeting of the platform, there is clearly an intention that the platform's products be relevant to multiple audiences. It is therefore important to ensure in their planning that these products meet the key needs of each of the different international agreements and processes to which they relate. This will be an important issue to consider in work programme implementation.

#### 2. Building on existing initiatives and experiences

Each of the information documents on the work programme prepared for the Nairobi meeting 17. provided an overview of existing activities,<sup>10</sup> as did the gap analysis and other information documents prepared for previous meetings.<sup>11</sup> Many organizations, networks, programmes and processes are already carrying out work that is directly relevant to the platform and a crucial issue for it will be to engage effectively with these institutions while continuing to ensure its own integrity. This is likely to include ensuring greater clarity on the activities which the platform will actually carry out itself, and those which it will support or help bring into existence in other ways. At the Busan meeting an information document was submitted on potential relationships between the platform and existing institutions,<sup>12</sup> with a significant number of further examples. This information document also suggested some potential mechanisms for collaboration and influence, including: liaison and coordination; staff secondments to the platform; considering what other processes produce as inputs to or products of the platform; promoting cooperation and coordination; providing mandates and potentially increased access to funding; influencing priorities; influencing activities; joint programmes of work; and direct contract. Further details on each approach are included in the information document referenced.

#### 3. Strategic partnerships

18. In order both to increase efficiency and to build relationships for programme implementation, and to some extent also to build credibility and allow for earlier delivery (see below), it might be appropriate for the platform to enter into a number of strategic partnerships. These might be with a variety of organizations and for a range of purposes, but key potential strategic partnerships to be established in the first instance in respect of the work programme might include the following:

(a) With other assessment processes and their secretariats, in order to build collaborative work in key areas to help ensure coherence and to avoid duplication;

(b) With the biodiversity-related multilateral environmental agreements and, in particular, with their scientific advisory bodies, and with the coordination bodies established by those agreements, including the Biodiversity Liaison Group and the meetings of the chairs of scientific advisory bodies of the biodiversity-related conventions, in order to align interests and activities and to streamline the process of submitting and receiving requests to and from the plenary;

(c) With organizations and initiatives whose work is directly relevant to implementation of priority areas of the work programme.

<sup>10</sup> See references 2, 3, 4 and 5.

<sup>11</sup> See references 12, 13 and 14.

<sup>12</sup> See reference 16.

# 4. Early achievements

19. It has been suggested in the initial exchange of views on the work programme that opportunities should be identified for early achievements (also referred to elsewhere as "quick wins", or "low-hanging fruit") in the platform's work programme. These would be activities that could be quickly implemented so as to demonstrate rapid progress and promote the platform's value to Governments and other stakeholders, including donors. Opportunities for early achievements could be identified at an early stage in the operationalization of the platform, and built into the work programme and prioritization process.

20. While some potential opportunities have been identified, such as building on existing initiatives or assessments focused on specific ecosystem services, Governments and other stakeholders may wish to confirm these and identify others during discussion on the work programme for further consideration and decision by the plenary. During the international expert meeting on the intergovernmental platform and capacity-building a number of further recommendations were made on identifying such opportunities,<sup>13</sup> and other independent expert workshops have also considered such opportunities. Governments may wish to consider these suggestions further.

## 5. Coherence in work programme implementation

21. It will be important to put in place arrangements that help ensure coherence in the implementation of the work programme so that the activities are mutually supporting and are part of a coherent whole. This can be addressed more substantively when there is a clearer understanding of what is to be included in the work programme. Also in respect of coherence, there may be value in considering aligning the work programme with the work programmes of other assessment processes to the extent necessary to ensure potential synergies and to avoid duplication.

# C. Further considerations

#### 1. Communication

22. Communication will be a significant issue for the platform, whether in terms of communicating its products, engaging its stakeholders, securing the interest of policymakers and donors, or broadening the understanding of why it is important to use science effectively in decision-making on biodiversity and ecosystem services. Internal communication is also important in ensuring efficiency in implementation, and in this respect it may be valuable to develop modern and dynamic instruments for internal communication, such as a portal for access to key data sources; a discussion forum; e-learning facilities and other online tools; a knowledge management platform; and others.

23. The issue of communication goes well beyond the work programme and is not substantively addressed in the present note. It is important, however, to be aware of the fundamental role of effective communication in, among other matters:

- (a) Ensuring ownership of the process by all key stakeholders;
- (b) Ensuring the full engagement of stakeholders in implementing the work programme;
- (c) Creating an awareness of the need for the platform and the activities that it promotes;
- (d) Ensuring a wide audience for the products and services that the platform delivers;

(e) Creating sufficient interest for securing resources for implementing the work programme;

(f) Increasing efficiency in activities associated with the platform.

#### 2. Languages

24. In order to ensure full stakeholder engagement, and the full and proper implementation of the platform, it is imperative to ensure the use of all United Nations languages in its materials, websites and meetings. The time and means for doing this will need to be built into the work programme, and also into all the platform's other activities, and this will of course also have cost implications.

#### 3. Stakeholder involvement

25. It is well understood that a very broad range of stakeholders should be involved in the platform in one way or another, including governmental and non-governmental organizations, and that it should embrace scientists and other knowledge-holders, and should engage all sectors of society. This has implications for participation in the development and implementation of the work programme, and the mechanisms by which contributions to the platform's activities might be made.

#### 4. Monitoring and evaluation

26. It was agreed in paragraph 8 of the Busan outcome that "the platform's efficiency and effectiveness should be independently reviewed and evaluated on a periodic basis". This applies to all the platform's activities, including the work programme. A process for evaluating the platform will need to be developed that includes the platform's work programme, the manner in which it is implemented, the value of the outputs, and the outcomes and impacts that it achieves.

#### 5. Other relevant issues

27. In addition to these considerations there are a number of factors which will have a significant impact on the process and manner in which the work programme is implemented. These include:

(a) Agreement on processes and procedures, for example for the selection of authors, the conduct of peer reviews, and ensuring appropriate regional, gender, discipline and knowledge-type balance in participation;

(b) The subsidiary bodies that might be established by the plenary, whether permanent or temporary, and how these might relate to implementation of the different parts of the work programme;

(c) The secretariat arrangements for support to the work programme, and whether technical support units are to be established to address particular areas of the work programme or for regional delivery.

# III. Possible elements of the platform's work programme

28. Discussion of the work programme has focused to date on four key functions: assessment; knowledge generation; policy support tools and methodologies; and capacity-building. It has been noted on several occasions, however, that these four functions are not mutually exclusive, and that they need to be addressed by one coherent programme. In this section the four functions and the potential interrelations among them are introduced, followed by the presentation of a number of potential activities which between them address the four functions agreed upon in the Busan outcome.

## A. Work programme functions agreed upon in the Busan outcome

#### 1. Assessments

29. On the subject of assessments the Busan outcome states, in paragraph 6 (c): "The new platform should perform regular and timely assessments of knowledge on biodiversity and ecosystem services and their interlinkages, which should include comprehensive global, regional and, as necessary, subregional assessments and thematic issues at appropriate scales and new topics identified by science and as decided upon by the plenary. These assessments must be scientifically credible, independent and peer-reviewed, and must identify uncertainties. There should be a clear and transparent process for sharing and incorporating relevant data. The new platform should maintain a catalogue of relevant assessments, identify the need for regional and subregional assessments and help to catalyse support for subregional and national assessments, as appropriate." In an information document prepared for the first session of the plenary meeting, the secretariat has already reviewed previous discussions on this issue, considered ongoing activities in this area, and identified some of the remaining gaps and needs.<sup>14</sup> The potential activities set out in the document below draw on this earlier work, and also draw on the report of the Tokyo workshop on approaches to assessment convened by the Governments of Japan and South Africa.<sup>15</sup>

30. This element of the work programme is integral to all the other three functions. Assessments are based on available data, information and knowledge, and lead to improved understanding of gaps in such knowledge, and of knowledge generation needs in the future. Capacity-building has formed an

<sup>14</sup> Note by the secretariat on options for the work programme of the platform on assessments (UNEP/IPBES.MI/1/INF/4/Add.1) – see reference 3.

<sup>15</sup> Report in document UNEP/IPBES.MI/1/INF/12 – see reference 8.

important part of nearly every international assessment process undertaken in the recent past, either directly (e.g., through fellowships and dedicated workshops) or indirectly (e.g., by taking part or engaging in the assessment process). Finally, assessments are themselves tools for supporting policy formulation and implementation, and can be a useful means for identifying and assessing policy options and policy-relevant tools and methodologies.

#### 2. Knowledge generation

31. Concerning knowledge needs, the Busan outcome states, in paragraph 6 (b): "The new platform should identify and prioritize key scientific information needed for policymakers at appropriate scales and catalyse efforts to generate new knowledge by engaging in dialogue with key scientific organizations, policymakers and funding organizations, but should not directly undertake research." The potential activities set out below draw on the information document prepared for the first session of the plenary meeting,<sup>16</sup> and on the report of a meeting in Paris convened by the International Council for Science (ICSU) and UNESCO,<sup>17</sup> refined by the intersessional review process.

32. Information on the full range of knowledge needs is likely to be a significant output from assessments undertaken by the platform, as identification of knowledge needed is both an essential part of the scoping process and a key output from the assessment of the state of knowledge. Assessments can provide a clear identification of the needs of policymakers for which information availability is limited, and for which new research or monitoring programmes, or other knowledge is required. Capacity-building will also be an important prerequisite for adequately responding to some of the identified needs in relation to knowledge generation, as well as for integrating knowledge from multiple and diverse sources.

#### 3. Policy support tools and methodologies

33. On policy support tools and methodologies, the Busan outcome states, in paragraph 6 (d): "The new platform should support policy formulation and implementation by identifying policy-relevant tools and methodologies, such as those arising from assessments, to enable decision makers to gain access to those tools and methodologies, and, where necessary to promote and catalyse their further development." In an information document prepared for the first session of the plenary meeting, the secretariat has already briefly reviewed previous discussion on this issue, considered ongoing activities in this area, and identified some of the remaining gaps and needs.<sup>18</sup> The options set out below draw on this earlier work, and on discussion at the international expert workshop on policy support through relevant tools and methodologies, held in Bonn in December 2011.<sup>19</sup> In these information documents, a range of policy support tools and methodologies are briefly described with the aim of increasing understanding of what is being discussed. These include:

(a) Assessments, and communication and interpretive materials derived from them, including mapping tools, indicators and metrics;

(b) Models, scenarios and other forecasting techniques, including early warning mechanisms;

(c) Risk, cost-benefit, and trade-off analyses, including valuation techniques and offsetting frameworks;

(d) Tools that increase access to data, information, lessons learned, and other knowledge, and deliver it in meaningful ways;

(e) Other analysis and interpretation tools.

34. Most major assessments comprehend social and economic, policy and other response measures within their scope, which may well include assessment of policy-relevant tools and methodologies. In addition, resources such as handbooks, manuals, training courses and best practice kits have been developed to promote specific tools and methodologies, and increasingly these are available on web-based platforms. This element of the work programme, however, might also identify other tools and methodologies useful for supporting policy formulation and implementation, in response to relevant requests for assessments. Increasing access to such tools and methodologies and promoting and catalysing their development will be an important element of capacity-building for their use.

<sup>16</sup> See reference 2.

<sup>17</sup> See reference 7.

<sup>18</sup> See reference 4.

<sup>19</sup> See reference 33.

# 4. Capacity-building<sup>20</sup>

35. On the subject of capacity-building the Busan outcome states, in paragraph 7 (f): "The new platform should prioritize key capacity-building needs to improve the science-policy interface at appropriate levels and then provide and call for financial and other support for the highest priority needs related directly to its activities by providing a forum with conventional and potential sources of funding" (subparagraph 6 (e)) and that "in carrying out its work the platform should … integrate capacity-building into all relevant aspects of its work according to priorities decided by the plenary." In an information document prepared for the first session of the plenary meeting, the secretariat briefly reviewed previous discussion on this issue, considered ongoing activities in this area and identified some of the remaining gaps and needs.<sup>21</sup> The options set out below draw on this earlier work (in particular the report of the international expert meeting on the intergovernmental platform and capacity-building convened by the Governments of Brazil and Norway, and held in Trondheim),<sup>22</sup> refined by the intersessional review process.

36. Capacity-building, as an integral component of the platform's work programme, will support assessment and knowledge generation and underpin the formulation and implementation of policy, as a cross-cutting activity for the platform. In particular, capacity-building is necessary for:

(a) Building the capacity of scientists and institutions in developing countries, which will be essential in increasing the availability and use of science in decision-making at all levels, and in ensuring that the contribution of knowledge to assessments becomes more geographically balanced;

(b) Promoting and supporting subglobal (including national) assessments which could draw on common methodologies and approaches, and take advantage of existing experience, contributing both knowledge and experience to the global, regional and thematic assessments that the platform might undertake;

(c) Providing access to and building capacity to use policy support tools and methodologies, and improving access to data, information, scientific literature and knowledge relevant to both assessment and development and use of policy tools and methodologies.

#### 5. Integrating the four work programme functions

37. As has been illustrated in each of the four preceding subsections, there are close relationships between each of the four proposed work programme functions, and many programme activities are likely to contribute directly to more than one of them.

38. A possible approach to representing the relationships between the agreed functions of the platform and between the platform, policymaking and scientific research is provided in the figure below, modified from that presented at the first session.<sup>23</sup> The arrows connecting the functions do not illustrate every potential relationship, but they are intended to illustrate the key relationships within the platform. There are numerous additional potential relationships created through activities that the platform might promote and facilitate: while these will contribute to strengthening the science-policy interface on biodiversity and ecosystem services, they might not be a direct part of the platform's work programme (such as assessments at the national level, or the undertaking of new scientific research). The figure also indicates, in respect of the potential activities outlined in subsection 2 of section C, the principal manner in which they might contribute across the platform's various functions.

<sup>20</sup> Whenever the term "capacity-building" is used in the work programme this should be taken to include the full range of potential capacity-building activities that might be undertaken to support strengthening the science-policy interface on biodiversity and ecosystem services, including technology transfer as appropriate.

<sup>21</sup> See reference 5.

<sup>22</sup> See reference 6.

<sup>23</sup> See reference 1.

# Figure 1





39. It is possible to envisage the work programme focused on assessments, with the three other functions of the platform's work programme integrated into the assessment process. It has been suggested that an integrated process along these lines would be more focussed on outcomes, and would have a greater likelihood of impact. While this is not explored further here, it may well be an issue worth further consideration when the full work programme is developed and adopted.

# B. Potential activities for inclusion in the work programme

40. In each of the following subsections a range of possible activities is provided, which between them address the four functions of the work programme agreed in the Busan outcome. The options range from ambitious and comprehensive activities to lighter and more incremental approaches, each with differing budget implications and potential mechanisms for delivery. In each section, potential activities are provided first, followed by explanatory text that underpins consideration of these options. The options focus on what might be done by the platform, but at this stage do not propose how the work programme might be implemented.

41. For the first session of the plenary, four information documents were made available, one on each of the functions of the work programme identified in the Busan outcome.<sup>24</sup> In each of these documents an effort was made to provide an overview of existing activities so that gaps and needs could be more readily identified, while also building on a number of information documents prepared for previous meetings.<sup>25</sup> The present document takes account of these information documents and the discussion on them at the first session of the plenary held in Nairobi last year. It also takes full account of the comments made during the subsequent intersessional process.

42. It is anticipated that, at the second session of the plenary, this working document will be supported by one or more information documents that provide further illustration of how the work

<sup>24</sup> See references 2, 3, 4 and 5.

<sup>25</sup> See references 6, 9, 12, 13, 14 and 16.

programme might be implemented. These information documents would also be based on inputs made by Governments, in particular during the intersessional process.

#### 1. Understanding of the assessment landscape

**Potential activity 1:** Develop and maintain a dynamic catalogue of the relevant assessment landscape, beginning with an initial assessment of assessments to provide an overview of assessment frameworks and approaches.

43. The Busan outcome, in paragraph 6 (c), envisages that the platform should maintain a catalogue of relevant assessments. An initial and incremental assessment of assessments (representing something similar to the work done in preparing for the establishment of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment (GRAME), including social and economic aspects,<sup>26</sup> or the recently released *Europe's Environment: An Assessment of Assessments*<sup>27</sup>) would contribute to determining a common conceptual and methodological approach to the platform's assessments.

44. It is not necessary that such an assessment of assessments would be a precursor to the initiation of the platform's assessments. However, an assessment of assessments might form a part of a scoping activity in relation to each assessment being undertaken by the platform, assisting in identifying the need for assessments at different scales, and helping in identifying other assessments and assessment processes which the platform might catalyse (e.g., national assessments) or on which it might build. Such an assessment of assessments would therefore both feed into and draw on scoping exercises undertaken in preparation for the platform's assessments.

45. In addition, the platform could maintain a peer-reviewed website for submission of local and national assessments. This would make possible the documentation of local and national assessments and datasets that may not appear in the peer-reviewed scientific literature, but which would facilitate access to otherwise unpublished sources of information for national, regional and global assessment. This could potentially be done in collaboration with the Sub-Global Assessment Network, which is already working to maintain updated information on the status of subglobal assessments worldwide.<sup>29</sup> Other initiatives already maintaining catalogues of assessments include the Prototype Environmental Assessment and Reporting Landscape (PEARL) initiative mounted by the United Nations Environment Programme (UNEP)<sup>28</sup> and the GRAME database<sup>29</sup> developed as part of the assessment of assessments referred to above. In addition, the interactive website developed by UNEP, known as UNEP-Live, which is currently being developed to provide easy access to environmental assessment reports and their content, may also contribute to this process.<sup>30</sup>

46. It is anticipated that the assessment of assessments would be a one-off activity carried out early in the life of the platform, although it may be periodically repeated or updated. It is also anticipated that the catalogue would be a continuing activity, although it may be modified over time to meet evolving needs.

#### 2. Developing and adopting consistent assessment methods and approaches

*Potential activity 2:* Develop, adopt, publish and widely promote a common conceptual framework and guidance on processes and methodologies to help ensure a consistent approach across regions, scales (including with national assessments) and themes.

47. In order to help ensure that assessments carried out on different scales are complementary and mutually supportive, and that the work done on one assessment can contribute to another at other scales, the platform could adopt and use in its assessments a common conceptual framework and definitions and, where appropriate, common processes, analytical approaches and methodologies, including scalable indicators and metrics and procedures for the use of traditional knowledge in assessments. Such a conceptual framework will need to be sufficiently flexible to ensure its applicability in a range of regional and other contexts, and to be employed across various thematic and disciplinary approaches.

<sup>26</sup> See reference 37.

<sup>27</sup> See reference 25.

<sup>28</sup> See reference 35.

<sup>29</sup> See reference 36.

<sup>30</sup> See reference 18.

48. Such work could build on existing and previous assessment initiatives, much of which has been identified in earlier information documents.<sup>31</sup> In particular, lessons from the global and subglobal assessment under the Millennium Ecosystem Assessment relating to processes and methodologies, compiled in the Assessment's handbook, *Ecosystems and Human Well-Being – A Manual for Assessment Practitioners*,<sup>32</sup> may provide a useful basis for the platform's approaches. Additional considerations can be found in the report of the independent science workshop on assessment approaches held in Tokyo in 2011,<sup>33</sup> and the independent science-agenda workshop convened by the Government of the United States of America in 2010,<sup>34</sup> and the outcomes of other workshops due to be held in early 2012 will also be relevant.

49. As a component of ensuring consistent approaches to assessment, and consistent with its conceptual framework, the platform might identify, develop, or adopt a series of common scalable indicators and metrics for use in its assessments that would allow comparability, integration and synthesis across assessments at all scales. Biodiversity and ecosystem services–related metrics and indicators are needed to monitor status and trends, drivers, impacts of change and responses, and are already in use by a number of intergovernmental processes for monitoring the achievement of both international and national commitments. Again there is significant experience that can be built upon, including current work led by the secretariat of the Convention on Biological Diversity and the Biodiversity Indicators Partnership concerning indicators for assessing progress in addressing the Aichi targets,<sup>35</sup> although there is clearly a need for more work to be done in this area.

50. Significant emphasis has also been placed on the multidisciplinary and transdisciplinary nature of the science and collaboration needed in delivering the platform's assessments. In this regard the Busan outcome explicitly indicates, in its paragraph 7 (h), that the platform should "take an interdisciplinary and multidisciplinary approach that incorporates all relevant disciplines, including social and natural sciences". It is anticipated that guidelines for ensuring effective incorporation of different scientific disciplines and other types of knowledge might therefore also include the following elements:

(a) Rationale for incorporation of different types of knowledge, and the engagement of different research and knowledge communities in implementing the platform's work programme;

(b) Encouraging dialogues between scientific disciplines to ensure that they are able to engage together efficiently for the platform's work programme areas;

(c) Ensuring the involvement of all appropriate stakeholders in identifying key related information on biodiversity and ecosystem services and in contributing knowledge to the platform's assessments;

(d) Promoting and facilitating appropriate studies and expert meetings where this is necessary and appropriate for exploring key issues further;

(e) Ensuring a strict independent peer-review process for all forms of knowledge used in the platform's assessments.

51. In order to implement assessments based on a common framework and approaches, it will therefore be necessary to develop guidelines for promoting the engagement of multiple scientific disciplines and other forms of knowledge in the work of the platform. The Millennium Ecosystem Assessment held a dedicated conference, in Alexandria, Egypt, from 17 to 20 May 2004, to respond to the need to bridge not only scales but also different epistemologies, through such measures as linking local knowledge and scientific information in assessments, and a process is being developed for drawing on indigenous knowledge in the Intergovernmental Panel on Climate Change (IPCC) assessment process, which could also be considered. Relevant work within the Convention on Biological Diversity, such as the guidelines under the programme of work on article 8 (j), and within the World Intellectual Property Organization (WIPO) might also be considered.

52. It has also been suggested that an expert workshop could be convened under the auspices of the intergovernmental platform, focusing on addressing the challenges around collaboration between scientists and traditional and other knowledge-holders. This could build on the discussions that have already taken place, for example at the informal expert meeting on potentials and pitfalls in the

<sup>31</sup> See references 3, 8, 9 and 12.

<sup>32</sup> See reference 23.

<sup>33</sup> See reference 8.

<sup>34</sup> See reference 15.

<sup>35</sup> See reference 32.

exchange of knowledge systems in cross-scale ecosystem assessments, held in Jokkmokk, Sweden, in 2011.<sup>36</sup>

53. It is anticipated that this potential activity would actually comprise a number of one-off activities carried out relatively early in the platform's life, with periodic review and update whenever deemed necessary to take account of new developments and lessons learned. It should be noted that specific processes may need to be established to ensure that the appropriate review and updates are undertaken.

#### 3. Carrying out global and regional assessments

**Potential activity 3:** Based on requests from Governments, and input and suggestions from other relevant stakeholders, initiate regular regional and global assessments of knowledge on biodiversity and ecosystem services and their interlinkages, which might include subregional assessments, using a common conceptual framework and methodologies.

54. It is anticipated that the platform's regional and global assessments would draw heavily on findings from national, local and subregional assessments, including those undertaken within the Sub-Global Assessment Network and other initiatives. An approach whereby the platform's assessment work was initiated with a series of regional assessments, including subregional assessments as appropriate, which at a later stage would contribute to regular comprehensive global assessments (at intervals to be determined) would align with the bottom-up approach agreed as a principle for the platform's work programme. The common conceptual framework and guidance referred to earlier would help to ensure that the data, information and knowledge used in or resulting from one assessment could also be drawn on as appropriate by other assessments.

55. Regional and global assessments might include assessments of the status and trends of biodiversity and ecosystem services and their interlinkages; of the drivers of change affecting biodiversity and ecosystem services and their interlinkages; of the consequences of changes in biodiversity and ecosystem services and their interlinkages for long-term human well-being and sustainable development; and of the effectiveness of response options available to Governments and other stakeholders in relation to the drivers of change and trends in biodiversity and ecosystem services and their interlinkages.

56. To ensure that the platform's plenary is fully informed in taking decisions on regional and global assessments, each assessment could be preceded by a scoping process, with a view to identifying available scientific and other information and knowledge. Such a scoping process would draw on and contribute to the catalogue of assessments, and also improve understanding of available information by stakeholders requesting assessments. In the event that the body of knowledge necessary to respond to requests was not available, the platform's scoping process could ensure that such requests were passed to the scientific community to be addressed through further research as part of the platform's knowledge-generation function.

57. It is anticipated that this would be an continuing activity, with a number of assessments potentially under way at any one time, all at different stages in their life cycle.

#### 4. Catalysing and promoting national and subregional assessment activities

**Potential activity 4:** Promote and catalyse support for national assessments, and facilitate them through the conceptual framework for the role that they play in national and subregional policy formulation and decision-making, and for the role that they might play in contributing to a bottom-up approach to the platform's global and regional assessments.

58. Both the importance and range of subglobal assessments<sup>37</sup> continue to grow, building on work under way in follow-up to the Millennium Ecosystem Assessment and the Economics of Ecosystems and Biodiversity (TEEB) initiative, and also on other assessment work. The Busan outcome identifies the need to catalyse support for subregional and national assessments, while recognizing that the platform will not itself be carrying out national assessments. In respect of such assessments it is useful to note that:

<sup>36</sup> See reference 28.

<sup>37</sup> While within the context of the Millennium Ecosystem Assessment subglobal assessments had a specific definition, the Sub-Global Assessment Network that has evolved from the follow-up to the Millennium Ecosystem Assessment has no strict definition of what a subglobal assessment is and seeks to support any form of assessment on biodiversity and ecosystem services that meets national and subregional needs.

(a) Subglobal assessments have the potential to deliver meaningful results for policymakers at the scale at which they are set, but can also make a valuable input to global and regional assessments;

(b) Linking global and subglobal assessments can be a powerful lever for capacity-building, particularly if focused first on promoting and facilitating subglobal assessments, especially at meaningful subregional levels;

(c) There is already a Sub-Global Assessment Network in place,<sup>38</sup> which brings together local, national and subregional assessments in a bottom-up manner to share and improve access to experience, tools and guidance, and to identify what can potentially be strengthened and built upon.

59. Identifying the most efficient ways of further promoting and supporting national and subregional assessments could lead to increased opportunities for peer-to-peer learning and building a community of practice, and increase access to existing tools and guidance materials, both by drawing on existing resources and by developing new tools and guidance where this is necessary. The common conceptual framework and guidance referred to earlier would help to ensure that the data, information and knowledge used in or resulting from one assessment could also be drawn on as appropriate by other assessments.

60. It is anticipated that the platform might explicitly call for the conduct of national and subregional assessments, and ask for regular reports to be made to the plenary (potentially by the Sub-Global Assessment Network). Such assessments might also be identified as capacity-building priorities (see subsection 13 of this section, below).

#### 5. Carrying out thematic assessments and assessment of new topics identified by science

**Potential activity 5:** Based on requests from Governments, and input and suggestions from other relevant stakeholders, initiate thematic assessments (including assessments of new topics identified by science where there is an urgent need to inform policy).

61. Thematic assessments (including assessments on new topics identified by science) provide important opportunities to raise awareness and understanding of emerging issues, to address high-priority specific needs and to provide timely answers to urgent policy-relevant questions. They also have the potential to offer some early opportunities to demonstrate the platform's added value.

62. Indicative examples of areas that may warrant thematic assessments might include: status and trends of pollination services; the potential environmental consequences of bio-energy; land tenure, food security and biodiversity; best practice restoration of ecosystem services; the environmental impacts of new and emerging technologies; the values of ecosystem services in drylands; or the scientific underpinning for the role of protected areas in meeting national development and biodiversity conservation targets. As with regional and global assessments, thematic assessments might include consideration of status and trends, drivers of change, consequences of change for human well-being, and the effectiveness of available response options, as appropriate.

63. Thematic assessments (including assessments of new topics identified by science) might be carried out on an ad hoc basis, according to criteria decided by the platform's plenary, and might be prepared in partnership with other ongoing assessment initiatives as appropriate. New topics might be identified through existing scientific processes or tools, such as horizon scanning or a foresight process, which are already used by many Governments and scientific processes, examples of which were included in the gap analysis<sup>39</sup> (see section E.2.4 and Annex R of the analysis), or otherwise through establishing a procedure whereby suggestions on new topics are brought to the plenary for consideration in a timely manner, for example by scientific subsidiary bodies of the relevant multilateral environmental agreements.

64. In a similar manner to that of regional and global assessments, to ensure that the plenary is fully informed in taking decisions on thematic assessments, a scoping process could be undertaken to identify available scientific and other information and knowledge. Such a scoping process would draw on and contribute thematic assessments to the catalogue of assessments, and also improve understanding of available information by stakeholders requesting assessments.

65. The results of thematic assessments (including assessments of new topics identified by science) could be published as stand-alone assessment reports, but also integrated into regional and global assessments as appropriate. The common conceptual framework and guidance referred to earlier

<sup>38</sup> See reference 29.

<sup>39</sup> See reference 9.

would help to ensure that the data, information and knowledge used in or resulting from one assessment could also be drawn on as appropriate by other assessments.

66. It is anticipated that this would be a continuing activity, with potentially a number of assessments under way at any one time, all at different stages in their life cycle.

#### 6. Identifying and prioritizing gaps in knowledge

**Potential activity 6:** Compile and maintain an annotated list of identified policy-relevant knowledge needs that arise from other work programme activities, and put in place a process involving the research community and other knowledge holders whereby the platform's plenary reviews and prioritizes the list of identified gaps.

67. Many activities in the work programme will lead to the identification of policy-relevant knowledge gaps, or otherwise indicate where the data, information or capacity are insufficient. Specifically, gaps in data, information and knowledge will be especially identified by both the scientific and policy communities while carrying out a review of available data, information and knowledge in scoping exercises and while themselves carrying out regional, global, subregional and thematic assessments.

68. Knowledge needs can also be exacerbated by problems affecting the availability and accessibility of existing data, information and knowledge. This is further considered below, under potential activity 15.

69. It is anticipated that compilation of the list would be an ongoing but periodic activity, the timing of which would depend on the timetables for the scoping exercises and assessments that would inform its compilation. It is anticipated that review and prioritization by the plenary would be a regular process.

### 7. Engaging key stakeholders in addressing prioritized knowledge needs

**Potential activity 7:** Develop and implement a communication strategy to engage with the research community and other knowledge holders in order to encourage them to meet identified knowledge needs, and to ensure that those funding research are aware of the identified knowledge needs and the research requirements for meeting them.

70. The organization of communications and dialogues to promote regular exchanges between scientists, donors, society and policymakers, including with the scientific advisory bodies to the multilateral environmental agreements, is important to develop an understanding of knowledge needs, to engage the research community and to identify related funding priorities. It is anticipated that the platform would function as an initiator, facilitator and mediator in such dialogue processes, working in close collaboration with existing institutions. The resulting process would facilitate cost-effective and coherent policy-relevant knowledge generation on biodiversity and ecosystem services and their interlinkages.

71. Communicating with and influencing funding agencies are important elements of the platform's function, aiming to ensure that policy-relevant knowledge needs are addressed in research strategies and funding and that sustainable input is provided from research and monitoring exercises and from associated funding structures.

72. A strategy for engagement with the research community, other knowledge-generation processes and the donor community to ensure that prioritized knowledge needs are met might include the following related elements:

(a) Developing and communicating a clear rationale for including the platform's current and future needs in the work programmes and strategies of scientific networks and donors;

(b) Promoting and, where appropriate, convening regular dialogues between scientists, policymakers and other knowledge-holders, to develop an understanding of knowledge needs, so that this can be taken up in developing research strategies and in other knowledge-generation processes, and in setting funding priorities;

(c) Communicating information on knowledge needs to the wider scientific community, other knowledge-holders, funding agencies, and the capacity-building community at large;

(d) Encouraging and collaborating with the research community in developing a coherent knowledge-generation strategy to guide further research on biodiversity and ecosystem services;

(e) Collaborating with funding agencies and associated policymakers in the development of an enhanced funding strategy for research and long-term monitoring.

73. It is anticipated that this would be a continuing process, but at a relatively low level, with much of the work done through communication and partnership with appropriate organizations. At the same time, this may well be supported by mandates from a future plenary meeting of the intergovernmental platform.

#### 8. Partnerships with long-term observation and monitoring programmes

**Potential activity 8:** Identify and develop partnerships with long-term observation and monitoring programmes that provide the data and information necessary for indicators and metrics, in addition to those programmes that help to ensure the availability of the resulting data.

74. An assessment of the current status of long-term observation and monitoring programmes in respect of the platform's needs might be a first step towards a comprehensive approach to addressing data and information needs on biodiversity and ecosystem services across scales. While a number of long-term monitoring programmes exist at both national and international levels, not all monitoring needs are covered (see for example report prepared for the Convention on Biological Diversity on the adequacy of biodiversity observation systems to support the Aichi targets) and greater synergies could be achieved through the adoption of common observation and monitoring approaches.

75. With regard to specific activities currently under way, section E.1.3 of the gap analysis provided a brief summary and gave examples of existing initiatives aiming to promote long-term observation and monitoring programmes and to improve access to observation data. For example, the following both have significant government involvement:

(a) The Group on Earth Observations Biodiversity Observation Network (GEO BON)<sup>40</sup> coordinates activities relating to biodiversity of the Global Earth Observation System of Systems (GEOSS), with the aim of organizing and improving biodiversity observations globally, and making their biodiversity data, information and forecasts more readily accessible;

(b) While not itself an observation or monitoring programme, the Global Biodiversity Information Facility (GBIF)<sup>41</sup> facilitates a decentralized network of databases on species occurrence data with the specific purpose of improving access to data arising from collection, observation and monitoring programmes.

76. A range of ecosystem service-related observation and monitoring initiatives at the global and regional level are also relevant, and the plenary might consider whether partnerships are required with components of global and regional observing systems in support of the platform's work. The platform's conceptual framework will also be important in informing observation and monitoring activities covering the main drivers of change of ecosystems and human well-being, impacts of trends, and responses.

77. It is anticipated that this would be a continuing process, but at a relatively low level with much of the actual work done through partnership with appropriate organizations. This may well be supported by mandates from a future meeting of the plenary, however, and both the plenary subsidiary bodies may also identify priority data needs.

#### 9. Making effective use of modelling and scenarios

*Potential activity 9:* Identify how to make effective use of modelling and scenarios in the context of the platform.

78. Scenarios are a key element of many assessment processes, and are frequently used as policy support tools and methodologies. Modelling is also a tool that can be used to inform both assessments and decision-making, but as clearly stated in finding 4.4 of the gap analysis, "there is a need for more integrated quantitative models, scenarios and indicators that will aid understanding of not only biodiversity and ecosystem services, but also the relevance of biodiversity and ecosystem services to human well-being". Models and scenarios are two different tools, which, while they are sometimes used in combination, are often used independently. While models are essentially science-based, scenarios can vary widely from exploratory exercises based on a range of uncertainties, to prospective

<sup>40</sup> See reference 38.

<sup>41</sup> See reference 39.

exercises based on user-identified targets, and they often rely on participatory processes with stakeholders.  $^{42}$ 

79. Various reviews have provided a comprehensive assessment of areas in which models and associated scenario exercises for biodiversity and ecosystem services need to be improved in order to enhance their value in supporting decision-making processes, and have made clear recommendations – and there is also considerable potential for coordination with and the learning of lessons from the IPCC scenario and modelling exercises. For example, a recent report on biodiversity scenarios commissioned by the secretariat of the Convention on Biological Diversity for input to the Global Biodiversity Outlook<sup>43</sup> reviewed the projections of a range of models and associated scenarios, and made a number of recommendations for models and scenarios. In addition, a report on scenarios and models for exploring future trends of biodiversity and ecosystem services commissioned by the European Commission<sup>44</sup> reviewed in detail 41 models, providing comparative information and analysis.

80. The conclusions from these reports, augmented by work undertaken since, might help identify what can be done to improve the use of models and scenarios in the work of the platform. Both suggest the need for further elaboration of a range of the relationships between biodiversity and ecosystem services on one hand and social and economic issues on the other, built on a more robust understanding of these relationships. This will potentially enhance the value of scenarios in helping to use science in a manner that better supports the decision-making processes through illustration of the implications of policy alternatives for biodiversity, ecosystem services and human well-being.

81. It is anticipated that this potential activity would actually comprise a number of one-off activities carried out relatively early in the platform's life, with periodic review and update as deemed necessary to take account of new developments and lessons learned. Much of this might be carried out through appropriate partnerships.

#### 10. Identifying policy-relevant tools and methodologies

*Potential activity 10:* Develop, maintain and communicate an overview of policy-relevant tools and methodologies, including their use by policymakers and the needs for their further development.

82. There is a wide array of evolving policy-relevant tools and methodologies, different scales and spheres of application and a broad spectrum of entities involved in their development. An initial scoping activity might be important not only to help define the scope of the tools and methodologies, but also for the further identification of work on tools and methodologies under way elsewhere. The scope of this activity might be defined by limiting the number of examples of tools and methods reviewed, or by initially limiting the types of tools being considered. For example, the platform may focus in a sequenced or prioritized manner on specific groups of tools, such as conceptual frameworks, valuation methodologies, behavioural change models, and knowledge-based policy support tools.

83. After an initial scoping activity, the platform could then make available an annotated list of policy-support tools and methodologies as an online resource, based on actions taken to identify and assess policy-relevant tools and methodologies and the requirements for their further development. Work on this could be carried out through collaboration with communities of practice, working with different types of tools. Such a list could be regularly updated through periodic review and identification of new and emerging tools and the continuing needs of policymakers.

84. It is anticipated that this would be a one-off review – or series of reviews – followed by periodic update process, coupled with a communication exercise. This depends on the outcome of the proposed scoping activity, however, and may ultimately be an iterative process with the overview gradually growing over time as more and more types of tool are included.

#### 11. Improving access to policy-relevant tools and methodologies

**Potential activity 11:** Explore approaches to catalyse increased access to policy-relevant tools and methodologies prioritized by the platform, based on actions taken with regard to further promotion and development of priority tools and methodologies.

<sup>42</sup> See the report of the 2011 meeting in Tokyo – reference 8.

<sup>43</sup> See reference 27.

<sup>44</sup> See reference 26.

85. Improving access to policy-relevant tools and methodologies prioritized by the platform is an important element of capacity-building, and of supporting the uptake of assessment findings into decision-making. To achieve this is likely to require working with existing knowledge management platforms to enable decision makers to gain access to identified policy-relevant tools and methodologies, and to share good practices and approaches for the use of tools and methodologies.

86. It is anticipated that this activity would begin later, following review of the overview of tools and methodologies (potential activity 10). It would then become a continuing activity in partnership with others, the size of the activity and the approach taken depending on the decision of a future plenary meeting of the platform.

#### 12. Promoting and catalysing the further development of policy-relevant tools and methodologies

**Potential activity 12:** Based on the identified tools and methodologies, promote and catalyse further development of certain tools and methodologies, in order to respond to the needs of decision makers.

87. It is anticipated that this would comprise four related activities, which would be promoted and catalysed by the platform:

(a) Identifying priorities for the further development of existing tools and methodologies, and identifying new areas where policy-relevant tools and methodologies are required;

(b) Putting in place a process for developing, testing and customizing policy-relevant tools and methodologies, working with appropriate stakeholders, or encouraging others to do this work;

(c) Compiling and reviewing evidence on how well the policy-relevant tools and methodologies which have been identified for further development are assisting policymakers;

(d) Finding ways to promote wide-scale use of the policy-relevant tools and methodologies that have been prioritized by the platform.

88. The activities described here relate closely to and follow on from the identification of tools and methodologies described under potential activity 10. The catalysing of further tool development by other entities will be an important element of this part of the work programme, along with the importance of integrating both the identification and prioritization of the further development of tools with the platform's assessment and capacity-building functions. The platform could, for example, play a strong role in supporting objective assessment of the value of different tools and methodologies (such as scalable indicators for status and trends, drivers of change, impacts and responses – see potential activity 1) to policymakers, and promote and catalyse the further development of tools (such as models and scenarios for biodiversity and ecosystem services) in a manner similar to that of promoting and catalysing knowledge-generation.

89. It is again anticipated that this activity would begin later, following consideration of the overview of tools and methodologies (potential activity 10). It would then become a continuing activity undertaken in partnership with others, the timing and size of the activity depending on the decision of a future plenary meeting of the platform.

# 13. Identifying and prioritizing capacity-building<sup>45</sup> needs

*Potential activity 13:* Review capacity-building needs related to the platform's work programme, prioritize those needs, and identify appropriate mechanisms to meet them.

90. Identifying and prioritizing the key capacity-building needs necessary for improving the science-policy interface at appropriate levels is a central function of the platform. A process will be required for the plenary to identify priorities, and a clear understanding developed of those activities which will fall within the scope of the platform's work programme, and those that will be catalysed by the work programme. This is likely to be a continuing exercise, carried out in consultation with national and regional experts and other stakeholders.

91. Capacity-building will be required across different categories of stakeholder in the science-policy process. This might include, for example:

(a) Building capacity not only among scientists in delivering science relevant to policymakers, but also among policymakers in using that science;

<sup>45</sup> See footnote 30 above.

(b) Promoting processes that bring policymakers, scientists and other knowledge-holders together so as to increase mutual understanding, and to build trust;

(c) Ensuring the involvement of the full range of scientific disciplines;

(d) Developing processes that ensure the engagement of traditional knowledge and traditional knowledge-holders in a meaningful way.

92. In delivering on this activity, the platform should liaise with agencies involved in assessing capacity-building needs in the science-policy interface and responding to those needs in order to catalyse efforts by those agencies specifically to address the platform's highest priority needs and to report back to the plenary.

93. It is anticipated that this would be a periodic review and prioritization exercise, coupled with periodic liaison with key organizations involved in capacity-development and support for capacity-development activities. This is likely to also include regular reporting to the plenary on progress in addressing identified priority needs.

#### 14. Catalysing funding for capacity-building activities

**Potential activity 14:** Organize periodic meetings or conventions of donors, potential donors and practitioners with the intention of stimulating additional financing and increasing coordination between donors to achieve greater synergies from available funding.

94. It was agreed in paragraph 6 (e) of the Busan outcome that the platform should catalyse funding for priority capacity-building activities by "providing a forum with conventional and potential sources of funding". In support of this activity, the platform might:

(a) Prepare a list with the needs and financing gaps in capacity-building, to enable donors to take more efficient and informed decisions on the allocation of resources, building on work carried out under potential activity 13;

(b) Prepare a list of conventional and potential sources of funding as a basis for planning other activities designed to enhance access to funding, and develop an engagement strategy for communicating needs to these organizations and initiatives.

95. Drawing on the outcomes of these two activities, it is assumed that the proposed periodic meetings referred to above would review the needs previously identified and prioritized and help to identify how they might be addressed, including through:

(a) Identification of new financial and other resources;

(b) Understanding of how both existing and future projects might be modified to ensure that the identified needs are better addressed;

(c) Exploration of opportunities for greater collaboration between donors and practitioners in order to achieve greater coherence in addressing identified needs.

96. In delivering on this activity, the platform would again liaise with those agencies involved in supporting capacity-building and capacity-development activities, in order to help ensure their engagement and support and, it is hoped, to catalyse efforts by such agencies specifically to address the platform's highest priority needs.

97. It is anticipated that this would be a periodic exercise, coupled with periodic liaison with key organizations involved in capacity-development and support for capacity-development activities.

#### 15. Increasing access to data, information, and knowledge

*Potential activity 15:* Promote open and free access to data, information and knowledge (including publications), both to help ensure data comparability, credibility and transparency, and to build capacity to use such data, information and knowledge.

98. The ability to obtain and use available data and information and to have access to peer-reviewed literature are important elements of assessment processes. While assessments draw on the peer-reviewed literature, a number of them have also relied on datasets drawn together at different scales which are available through web-based data portals or other clearing-house mechanisms.<sup>46</sup> The

<sup>46</sup> Examples include the data portal for the Global Environmental Outlook and access to data tables and other materials for the Global Forest Resources Assessment of the Food and Agriculture Organization of the United Nations (FAO).

scientific credibility of an assessment depends in part on the quality, comparability and accessibility of data. Furthermore, the accessibility of the data lends itself to the transparency of the process by enabling individuals and organizations not involved in the assessment to review the underlying data. In addition, the provision of data-integration tools would allow stronger links to be forged between different assessments conducted by the platform.

99. Improving access to data, information and knowledge that already exist, including open and free access to scientific publications, has also been clearly identified as an important element of capacity-building.<sup>47</sup> Some of the key issues to be taken into consideration include:

(a) If access to existing data, information and knowledge were improved (while recognizing the sensitive nature of certain data), this would, in itself, improve its use in decision-making;

(b) The barriers to increasing access to existing data, information and knowledge are generally known, and surmountable with appropriate will and support;

(c) There are many organizations working to improve access to existing data, which, with appropriate political and financial support, could help ensure that the platform has a significant impact.

100. With regard to promoting open access to data, information and knowledge, decision X/15 of the Conference of the Parties to the Convention on Biological Diversity called on its Executive Secretary to "explore, in collaboration with Parties, other Governments, relevant partners and members of the Conservation Commons, ways to promote free and open access to data and information for conservation purposes, and report back on progress at the next meeting of the Conference of the Parties". This review process is under way and, following its review by parties, is expected to be available for the meeting of the Convention's Working Group on Review of Implementation, to be held in May 2012.

101. This activity could be achieved through decisions of the plenary (which convey the views of Governments to the holders of data, information and knowledge), through providing mandates to other organizations to play an active role in this process and through promoting the national establishment of clearing-house mechanisms and information networks, as national portals or processes through which knowledge can be more widely shared, including by providing data and information to support assessments conducted by the platform.

102. The platform could promote and as necessary support improved access to the data, information and knowledge that have been identified as necessary for delivery of specific platform products, including ensuring the necessary quality and reliability of data. This might include, for example, access to data necessary for deriving any agreed indicators that are needed for global or regional assessments. Many institutions and processes are already managing – or improving access to – datasets related to the status and trends in biodiversity and ecosystem services, drivers and impacts of change, and responses, many of which are based on the compilation of data from national sources. The platform might wish to establish links with these existing institutions and processes, while recognizing that they already have their own priorities, timetables, governance structures and limitations.

103. It is anticipated that this would be a continuing process, but at a relatively low level with much of the actual work done through partnership with appropriate organizations. This may well be supported by mandates from a future plenary meeting of the platform, however, and both the plenary subsidiary bodies may also identify priority data needs, including through the process of identifying capacity-building priorities.

#### 16. Addressing balance in participation in the platform's work programme

*Potential activity 16:* Develop a plan and recommendations to ensure balanced participation in the panel's work programme.

104. In addition to the other potential capacity-building activities, further action is likely to be necessary in order to ensure balanced participation in the platform's work programme, including by regions, disciplines and developed and developing countries. In this regard, examples of the types of capacity-building support delivered by seven different international assessment processes are included in annex 3 to the scoping paper on capacity-building for the intergovernmental platform, prepared for the international expert meeting in Trondheim.<sup>48</sup> The following list of activities, derived from this brief analysis, aims both to build capacity and to ensure full and balanced participation in the various activities of the platform:

<sup>47</sup> See references 6 and 10.

<sup>48</sup> See reference 24.

- (a) Development and promotion of tools, standards and methods manuals;
- (b) Delivery of training and workshops, including through e-learning;
- (c) Provision of technical support and technology transfer;
- (d) Establishment of networks for sharing experience and information;
- (e) Identification of processes for the full engagement of stakeholders;
- (f) Establishment of fellowship programmes for young scientists;

(g) Facilitation of meeting participation for scientists and other knowledge-holders from developing countries.

105. As an example of a potential approach that could be included in the plan and recommendations referred to above, the Millennium Ecosystem Assessment ran a fellowship programme which was designed to increase the number of early-career scientists involved as authors, and approximately 40 fellowships were awarded under this programme. IPCC has also established a scholarship programme.

106. It is anticipated that this would be a continuing priority activity.

# Annex

# **Annotated references**

Where links are provided to documents available online, they are to the English language versions. Other language versions may also be available.

#### A. **IPBES documents and information documents** (all available from www.ipbes.net)

- 1. Possible work programme of the platform (UNEP/IPBES.MI/1/7)
- 2. Options for the work programme of the platform on knowledge generation (UNEP/IPBES.MI/1/INF/3/Add.1)
- 3. Options for the work programme of the platform on assessments (UNEP/IPBES.MI/1/INF/4/Add.1)
- 4. Options for the work programme of the platform on policy support (UNEP/IPBES.MI/1/INF/5/Add.1)
- 5. Options for the work programme of the platform on capacity-building (UNEP/IPBES.MI/1/INF/6/Add.1)
- Final report of the international expert meeting on IPBES and capacity-building, co-convened by the Governments of Norway and Brazil and held in Trondheim, Norway, on 25-27 May 2011 (UNEP/IPBES.MI/1/INF/10)
- Considering the generation of knowledge function of IPBES: Recommendations from a meeting of scientific organizations interested in IPBES convened by ICSU, and hosted by UNESCO in Paris, on 10 June 2011 (UNEP/IPBES.MI/1/INF/11)
- Report of an international science workshop on assessments for an intergovernmental sciencepolicy platform on biodiversity and ecosystem services, held in Tokyo, Japan from 25 to 29 July 2011 (UNEP/IPBES.MI/1/INF/12)
- 9. Gap analysis for the purpose of facilitating the discussions on how to improve and strengthen the science-policy interface on biodiversity and ecosystem services (UNEP/IPBES/2/INF/1)
- 10. Capacity-building in an intergovernmental science-policy platform on biodiversity and ecosystem services which was submitted by the Group of Latin American and Caribbean countries (UNEP/IPBES/2/INF/6)
- 11. Report of the third ad hoc intergovernmental and multi-stakeholder meeting on an intergovernmental science-policy platform on biodiversity and ecosystem services which includes, in its annex, the Busan outcome (UNEP/IPBES/3/3)
- 12. Analysis of the assessment landscape for biodiversity and ecosystem services (UNEP/IPBES/3/INF/1)
- 13. Current and future status of biodiversity and ecosystem service indicators (UNEP/IPBES/3/INF/2)
- 14. Analysis of capacity development for biodiversity and ecosystem services (UNEP/IPBES/3/INF/3)
- 15. Intergovernmental science-policy platform on biodiversity and ecosystem services science-agenda workshop held in Shepherdstown, United States of America, from 4 to 6 May 2010 (UNEP/IPBES/3/INF/8)
- 16. Potential relationships between the intergovernmental science-policy platform and existing institutions (UNEP/IPBES/3/INF/11)

# B. Decisions, documents and information documents from other intergovernmental processes

 Decision X/2 of the Conference of the Parties to the Convention on Biological Diversity on the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets (CBD COP decision X/2)

- Decision 26/2 of the UNEP Governing Council/Global Ministerial Environmental Forum on the world environment situation and, in particular, its section IV on UNEP-Live (UNEP/GC.26/19)
- 19. Suggested indicators for the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets (UNEP/CBD/SBSTTA/15/2)
- 20. Strategic Plan for Biodiversity 2011–2020: provisional technical rationale, possible indicators and suggested milestones for the Aichi Biodiversity Targets (UNEP/CBD/SBSTTA/15/3)
- 21. Report of the Ad Hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity (UNEP/CBD/SBSTTA/15/INF/6)
- 22. Adequacy of biodiversity observation systems to support the 2020 targets of the Convention on Biological Diversity (UNEP/CBD/SBSTTA/15/INF/8)

# C. Reports and publications

- 23. Ash et al. (2010). *Ecosystems and Human Well-Being A Manual for Assessment Practitioners*, (www.unep-wcmc.org/medialibrary/2010/10/31/90af3045/EcosystemsHumanWellbeing.pdf)
- 24. Capacity-building for IPBES: needs and options. A scoping paper (2011). Prepared at the UNEP World Conservation Monitoring Centre for the Norwegian Directorate for Nature Management (www.dirnat.no/ipbes)
- 25. EEA (2011). Europe's Environment: An Assessment of Assessments (www.eea.europa.eu/publications/europes-environment-aoa)
- 26. IEEP, Alterra, Ecologic, PBL and UNEP-WCMC (2009). Scenarios and models for exploring future trends of biodiversity and ecosystem services changes. Final report to the European Commission, DG Environment on Contract ENV.G.1/ETU/2008/0090r (ec.europa.eu/environment/enveco/biodiversity/pdf/Biodiversity\_Scenarios\_Models.pdf)
- Leadley et al. (2010). Biodiversity Scenarios: Projections of 21st century change in biodiversity and associated ecosystem services. CBD Technical Series No. 50 (www.cbd.int/doc/publications/cbd-ts-50-en.pdf)
- 28. Potentials and pitfalls in exchange of knowledge systems in cross-scale ecosystem assessments. Report from an informal expert meeting with representatives of the International Indigenous Forum on Biodiversity (IIFD), European Union experts and scientists engaged in traditional knowledge and the intergovernmental platform, held in Jokkmokk, Sweden, 21–22 June 2011 (www.ipbes.net/downloads/doc\_download/538-jokkmokk-report.html)

#### **D.** Websites

- 29. Sub-Global Assessment Network: www.ecosystemassessments.net -
- 30. GEO Data Portal: geodata.grid.unep.ch
- 31. Intersessional process of the intergovernmental platform: www.ipbes.net/plenarysessions/intersessional-process.html
- 32. Biodiversity Indicators Partnership: www.bipindicators.net
- 33. Information and relevant documents on the international expert workshop on policy support through relevant tools and methodologies, held 7–9 December 2011 in Bonn, Germany: www.bmu.de/english/nature/ipbes/doc/47888.php
- 34. AO Global Forest Resources Assessment 2010, with access to the reports and data tables: www.fao.org/forestry/fra/fra2010/enF
- 35. UNEP Prototype Environmental and Assessment Reporting Landscape: www.unep.org/pearl
- 36. Database that supports the Assessment of Assessments carried out in support of the Regular Process for the Global Reporting and Assessment of the State of the Marine Environment, including Socio-Economic Aspects (GRAME): www.unep-wcmc-apps.org/gramed
- 37. Towards a Regular Process for the Global Reporting and Assessment of the State of the Marine Environment, including Socio-Economic Aspects: www.unga-regular-process.org

- 38. Global Earth Observation Biodiversity Observation Network (GEO BON): www.earthobservations.org/index.shtml
- 39. Global Biodiversity Information Facility (GBIF): www.gbif.org, and GBIF data portal: http://data.gbif.org