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Items 5 and 6 of the provisional agenda\*

**Policy issues**

**Follow-up to and implementation of the outcomes of  
United Nations summits, in particular the United Nations  
Conference on Sustainable Development, and major  
intergovernmental meetings of relevance to the  
United Nations Environment Assembly**

**Proposed procedures for enhancing future assessment processes**

**Note by the secretariat\*\***

*Summary*

The present note, to which reference is made in the reports of the Executive Director on the implementation of Governing Council decision 27/2 (UNEP/EA.1/2/Add.1) and on the state of the environment (UNEP/EA.1/4 and Add.1), sets out proposed procedures for enhancing future assessment processes facilitated by the United Nations Environment Programme. The note builds on a review of current best practices and includes proposed procedures relating to general principles; stakeholder engagement and selection of participants; policy relevance, legitimacy and scientific credibility; transparency; administrative processes; conflict of interests; inclusion of divergent viewpoints; and government and peer-review processes. Following feedback from the United Nations Environment Assembly at its first session, this draft set of proposed procedures will be developed further in consultation with the scientific community, nationally recognized experts and member States before being finalized ahead of the global intergovernmental multi-stakeholder consultation on the sixth Global Environment Outlook assessment (GEO-6), which is scheduled to be held in September 2014.

\* UNEP/EA.1/1.

\*\* Issued without formal editing.

## I. Introduction

1. Assessment processes constitute the fundamental building blocks that support the UNEP core mandate to keep the world environment situation under review. They must, however, be underpinned by credible science, institutional networks, partnerships and multi-stakeholder collaborative mechanisms, which provide a number of support functions, such as catalysing data flows, facilitating access to and sharing of environmental information. Collectively, these structures and functions support various levels of decision-making, from global to local and set priorities for technology support, innovation, institutional redesign and capacity-building interventions.
2. Based on a review of best practices, this report provides a draft set of proposed procedures for strengthening future assessments and transparency safeguards, with an emphasis on: general principles; stakeholder engagement and selection of participants; policy relevance, legitimacy and scientific credibility; transparency; administrative processes; conflict of interest; inclusion of diverging viewpoints; and government and peer-review processes. Following feedback from UNEA, this draft set of proposed procedures will be developed further in consultation with the scientific community, nationally recognized experts and shared with Member States for comment before being finalized.

## II. Background

3. The Rio+20 outcome document, “The future we want”, emphasises in paragraph 76 (g) the promotion of the science-policy interface through inclusive, evidence-based and transparent scientific assessments, as well as access to reliable, relevant and timely data in areas related to the three dimensions of sustainable development, building on existing mechanisms, as appropriate.
4. Governing Council decision 27/11/I called upon UNEP to review best practices and develop a set of transparent procedures, particularly with regard to administrative processes, the selection of participants, the inclusion of diverging view points, as well as government and peer reviews to support a wide range of environmental assessments that the United Nations Environment Programme conducts in order to ensure that they are of the highest quality and have maximum impact.
5. It was stated that these procedures should be based on the knowledge and experience of nationally recognized experts and furthermore that current best assessment practices should be provided to Member States for comments. Those procedures relevant to the sixth Global Environment Outlook (GEO-6) assessment should be prioritized to feed into its preparation and should be provided to Member States for review and comment in time for the preparation of the sixth Global Environment Outlook assessment.
6. The Executive Director was also requested to ensure that the United Nations Environment Programme continues to build on the capacities developed during the GEO-5 process and other thematic and integrated assessments at the national, regional, subregional and global levels. This objective is to be accomplished by compiling and making available best practice assessment procedures with their different purposes, strengths and weaknesses, to all stakeholders.

## III. Review of existing best practice

7. The last twenty years have seen the emergence of an increasing number of large scale global assessments that provide objective scientific information of relevance to policy-making. Through these assessments and their evaluations, there has been a continual learning process for assessment practitioners and an evolution of methodologies, procedures, guidance, and best practice. The draft set of procedures proposed in this report has been largely drawn from Harvard’s Global Environmental Assessment (GEA) Project<sup>1</sup> and the following four global science policy processes.
8. The **Global Environment Outlook (GEO)**: UNEP has produced a series of GEO reports which have analysed environmental state and trends at the global, regional and subregional scales, described plausible outlooks for various time frames and formulated policy options. Each GEO report builds on the assessment findings of its predecessor and also draws from lessons learned based on evaluations as well as global processes such as the IPCC ad MA. Since 1997, UNEP has published five editions of the GEO. Substantial guidance has been produced to support the development of the GEO series, as well as an Integrated Environmental Assessment (IEA) Training Manual on how to carry out an integrated environmental assessment, including best practices, which has been applied in numerous cases at national, subregional and regional levels around the world.<sup>2</sup>

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<sup>1</sup> See: <http://www.hks.harvard.edu/gea>.

<sup>2</sup> See: [http://www.unep.org/geo/GEO\\_assessment.asp](http://www.unep.org/geo/GEO_assessment.asp).

9. The **Millennium Ecosystem Assessment** (MA) was carried out between 2001 and 2005 to assess the consequences of ecosystem change for human well-being. Following this assessment, experts published a book providing insights into assessment processes. *Ecosystems and Human Well-being - A Manual for Assessment Practitioners (2010)*<sup>3</sup> contains numerous case studies of best practice, offers a practical guide for undertaking ecosystem assessments and includes tools and approaches that can assess options for better managing ecosystems.

10. The **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services** (IPBES) was established in April 2012, and currently has 115 Member States. The Platform is an independent, intergovernmental body, open to all member countries of the United Nations. The second session of the Platform's Plenary (IPBES-2) adopted a number of key decisions including procedures for the nomination and selection of the Multidisciplinary Expert Panel (MEP) which has informed the development of the best practices regarding selection of participants presented in this report.

11. The **Intergovernmental Panel on Climate Change** (IPCC) undertakes complex scientific assessments in the area of climate change and has developed significant guidance in this regard. In addition, following some sustained criticism and a heightened level of public scrutiny of the Fourth Assessment Report, the United Nations and the IPCC asked the InterAcademy Council (IAC) to assemble a committee to review the processes and procedures of the IPCC and make recommendations for change that would enhance the authoritative nature of the IPCC reports. The recommendations can be found in the report *Climate Change Assessments – Review of the Processes and Procedures of the IPCC*.<sup>4</sup>

## IV. Proposed procedures for GEO and future assessments

### A. General principles

12. An assessment should follow an open and transparent process that is multi-scaled and multidisciplinary, building on previous and ongoing assessment work to avoid duplication, and ensuring scientifically credible and policy relevant findings.

13. Assessment data and information should be processed into knowledge products and made available in the public domain to the extent possible, taking into account the UNEP access to information policy.

14. The assessment should engage the best available scientific and policy expertise, taking into account disciplinary, geographic and gender balance through a merit-based and transparent nomination and selection process.

15. The assessment procedures should assist authors from developing countries and countries with economies in transition with participation, for example with access to scientific literature.

### B. Stakeholder engagement and selection of participants

16. The aim of a multi-stakeholder assessment process is to promote better decision-making by ensuring that the views of the main actors concerned about a particular issue are heard and integrated at all stages through dialogue and consensus building. The process takes the view that everyone involved has a valid view and relevant knowledge and experience to bring to the decision-making. Therefore effective stakeholder engagement leads to a greater sense of ownership of the assessment and up take of the findings.

17. UNEP has developed a policy for engagement with Major Groups and Stakeholders (MGS) along the following principles: (a) acknowledgement of the inter-governmental nature of UNEP processes; (b) access to information; (c) transparency and accountability for mutual benefit; (d) Respect for diversity of views and respect for self-organisation; and (e) improvements on current engagement practices.

18. With regard to GEO-6 and UNEP regional and subregional assessments, the following procedures and processes for engaging stakeholders and selecting participants are proposed:

(a) GEO-6 and UNEP regional and subregional assessments will engage a wide range of global and regional and subregional partners, reflecting an appropriate balance of developed and developing country participants, in the assessment as authors, experts, peer-reviewers and advisers;

<sup>3</sup> See <http://www.unep-wcmc.org/medialibrary/2010/10/31/90af3045/EcosystemsHumanWellbeing.pdf>.

<sup>4</sup> See

<http://reviewipcc.interacademycouncil.net/report/Climate%20Change%20Assessments,%20Review%20of%20the%20Processes%20&%20Procedures%20of%20the%20IPCC.pdf>.

This should include governments, United Nations agencies, funds and programmes and other international organizations, scientific institutions, centres of excellence, NGOs, indigenous peoples' networks and the private sector;

(b) UNEP will broaden and expand the participation in its assessments to deliver more "inclusive knowledge generation". It will do this through working with existing, and establishing new, Communities of Practice around topics relevant to the assessment. A Communities of Practice is a collective of stakeholders who collaborate together to generate knowledge around issues of importance to them. They are guided by moderators who may also represent them in other contexts;

(c) A GEO-6 Communities of Practice will be established to contribute data, information and analysis to inform the assessment based on the mandate provided through the Global Intergovernmental and Multi-stakeholder Consultation. The Communities of Practice will be comprised of government nominated experts, experts nominated by stakeholders and other relevant existing Communities of Practice. The moderators will be selected by consensus between the Communities of Practice and the GEO-6 Global Scientific Advisory Panel (see subpara. (j) below). Clear terms of reference will be developed for the moderators and the Communities of Practice. The Secretariat will provide technical support for the on-line platform and substantive support to the moderators. The Communities of Practice will help to identify data and information to inform the assessment, and participate in the peer review and outreach of the findings. Governments will also be invited to review the global assessment;

(d) Using the data/information and knowledge generated through the Communities of Practice, the GEO-6 assessment will be conducted by a group of experts, comprising Coordinating Lead Authors, Lead Authors, Contributing Authors and review editors. These experts will be selected by the Global Scientific Advisory Panel in consultation with the Communities of Practice moderators and UNEP/GEO Secretariat. The Scientific Advisory Panel will select the experts considering the following:

- (i) The required range of scientific, technical and socioeconomic expertise;
- (ii) Geographical representation, with appropriate representation of experts from developing and developed countries and countries with economies in transition;
- (iii) The diversity of knowledge systems that exist;
- (iv) Gender balance;

(e) A similar process will be developed for all the regions where UNEP is supporting regional and subregional assessments to feed into GEO-6.5. Each regional assessment process will be supported by a Regional Scientific Advisory Panel to ensure scientific credibility and overall quality of the regional assessments. Five Communities of Practice will be established and moderators selected by consensus between the Communities of Practice and the Regional Scientific Advisory Panel. As with the GEO-6 Communities of Practice it will comprise of government nominated experts, experts nominated by stakeholders and other relevant existing Communities of Practice. The Communities of Practice will help to identify data and information to inform the assessment, and participate in the peer review and outreach of the findings. Governments will also be invited to review the regional assessments;

(f) The regional and subregional assessments will be conducted by a group of experts, comprising Coordinating Lead Authors, Lead Authors, Contributing Authors and Review Editors. These experts will be selected by the Regional Scientific Advisory Panels in consultation with the Communities of Practice moderators. Every effort will be made to engage experts from the relevant region on the author teams for the assessments that deal with specific regions, but experts from other regions can be engaged when they can provide an important contribution to the assessment;

(g) All experts will be nominated and selected to join in an open and transparent manner drawing on the IPCC nomination process. The nominated experts will be engaged by the UNEP Secretariat on the basis of their expertise, with due consideration of gender and regional balances;

(h) Two advisory bodies will be recommended for GEO-6. A High Level Intergovernmental and Stakeholder Group with appropriate regional representation will be established to ensure policy relevance of the assessment and to prepare the Summary for Policy Makers. The following criteria will be taken into account in nominating and selecting members of the High Level Intergovernmental and Stakeholder Group:

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<sup>5</sup> Africa, Asia and the Pacific, Latin America and the Caribbean, Western Asia and Eastern Europe, Caucasus and Central Asia.

- (i) Expertise in international policy agenda;
- (ii) Experience on high level panels in relation to environmental policy and sustainable development.

(i) The High Level Intergovernmental and Stakeholder Group will be co-chaired by one representative from a developed country and one representative from a developing country, or from a country with an economy in transition, and will be regionally and gender balanced;

(j) A Global Scientific Advisory Panel will be established to guide the assessment process and to ensure scientific credibility and overall quality of GEO-6. It will comprise 2 experts from each region and up to 6 additional global experts. The following criteria will be taken into account in nominating and selecting members of the Scientific Advisory Panel:

- (i) Scientific expertise with regard to both natural and social sciences and traditional and local knowledge;
- (ii) Scientific, technical or policy expertise and knowledge of the main elements of the assessment;
- (iii) Experience in communicating, promoting and incorporating science into policy development processes;
- (iv) Proven ability to work in international scientific and policy processes;

(k) The focus and priorities of GEO-6 will be determined by the Global Intergovernmental and Multi-stakeholder Consultation scheduled for September 2014. The meeting will also agree on the scope, objectives and process of GEO-6. It will include participation from Governments, UNEP Major Groups and Stakeholders, United Nations agencies, funds and programmes;

(l) The focus and priorities of the regional assessments will be agreed at the proposed Regional Environmental Information Network meetings which will engage governments and other stakeholders. The regional priorities, which will be selected from regional priorities established by on-going regional fora, will also inform GEO-6.

### C. Policy Relevance, legitimacy and scientific credibility

19. Certain attributes of the assessment process are crucial for building an effective link between science and policy. These include relevance, legitimacy and credibility. These attributes make it more likely that the knowledge contained in an assessment will have influence.

20. **Relevance** (salience) is intended to reflect the ability of an assessment and its findings to address the particular concerns and knowledge requirements of a user. An assessment is relevant if the user is aware of it and it provides knowledge appropriate to support behavioural change or decision-making.

21. The process must identify key target audiences (policy-makers, managers and sectoral users, public and media) in the planning stages and ensure effective consultation and communication with them throughout the process so that final products are meaningful and owned by each audience. The process also determines how to engage decision-makers in dialogue over its findings and recommendations while ensuring an appropriate “boundary” between the experts and decision makers.

22. Policy relevance refers to the degree of applicability and practicality of the assessment findings for policy-makers and recommendations to policy-making processes. In other words, this term refers to how effectively the assessment findings help policy-makers arrive at informed decisions.

23. GEO-6 will result in an assessment report and a Summary for Policy Makers. The Summary for Policy Makers will accurately reflect the key policy messages arising from the findings of the assessment. It will be drafted by the High Level Intergovernmental and Stakeholder Group and presented to the Open Ended Committee of Permanent Representatives in March 2016 for negotiation and endorsement. The Summary for Policy Makers will be presented to UNEA 2 in June 2016.

24. **Legitimacy** is a measure of the perceived fairness of an assessment. A lack of legitimacy is evident, for instance, when one group questions the product or process of an assessment because it feels that its input was not considered, or when some nations believe that data sources or modelling approaches were dominated by experts from other regions.

25. Legitimacy is acquired through stakeholder involvement in its design and review, the inclusion of local experts and traditional knowledge of the environment, and reflecting different gender perspectives. The more stakeholders buy into a process and see it as their process responding to their

needs and concerns, the more they will pay attention to the results and take action or change their behaviour accordingly.

26. The legitimacy of the assessment is established if all interested parties are satisfied that their concerns and contributions were taken into account, if the process has been conducted in a transparent manner and if assessment products are widely available. It is the process which establishes the modalities for interested parties to contribute to the design of an assessment in the planning stages and to air their concerns throughout the process. The process must also agree on clearly-articulated responsibilities for those who participate, and provide for balance among the experts. It must ensure that procedures are transparent, commonly agreed upon and that they are followed. If the process includes efforts to strengthen the capacity of all interested groups to participate, this also enhances legitimacy.

27. **Credibility** refers to the perceived scientific and technical soundness of an assessment. Even if an assessment captures the attention of relevant audiences, its influence still depends on whether, and which, audiences consider the knowledge assembled to be valid.

28. Scientific credibility is also influenced by the extent to which the research, data and information on which the assessment will draw upon is recognized as a reliable source, and the extent to which the process used to assess and evaluate the reliability of information for inclusion into the assessment adheres to scientific principles.

29. The Global and Regional Science Advisory Panels will be responsible for ensuring the scientific credibility of the global and regional assessments. The panels will be responsible for selecting Coordinating Lead Authors, Lead Authors, Contributing Authors and Review Editors for the assessment; and ensuring the guidelines for scientific credibility are adhered to.

#### **D. Transparency**

30. Transparency is an important principle for building and promoting trust between the public, the scientific community, and governments.

31. Clear indications of how to access material for consideration in the assessment report, starting from the first draft, should be included in the contributions by authors and experts. For material available in electronic format only, the location where such material may be accessed and a soft copy of such material should be sent to the Secretariat for archiving.

32. Review processes support especially the credibility and relevancy of the assessment. Consultation processes support both legitimacy and relevancy of the assessment. In this regard, the Communities of Practice will support an “open method of consultation and dialogue” which involves continuous sharing of the underpinning data and information being used by chapter authors and which would allow data/information holders to check and verify.

33. Unpublished material, and outputs deriving from indigenous and local knowledge, may be used in assessments, provided that their inclusion is fully justified in the context of the assessment process and that their unpublished status is specified. Such materials will need to be made available to the review process and their sources identified by the report.

34. The final draft of a report should credit all report co-chairs, Coordinating lead authors, Lead Authors, Contributing Authors, reviewers and review editors and other contributors, as appropriate, by name and affiliation.

#### **E. Administrative processes**

35. The Secretariat is the operational unit that remains active between assessment reports, and thus provides important institutional continuity and centralized administrative support. Administrative processes aim at ensuring transparency and ensuring clear assignment of roles and responsibilities throughout the assessment process, as well as facilitating the delivery of the project through coordination, communication and financial management.

36. Possible administrative elements where UNEP could develop procedures to improve transparency include:

- (a) Overall management and oversight including activity schedule, key meetings, events and production milestones;
- (b) Internal operational structures and roles and responsibilities;
- (c) Roles and responsibilities of the various entities to be involved, including the identification of strategic partners in delivering the activity;

- (d) Means by which the procedures for the implementation of the work programme will be carried out to ensure effective peer review, quality assurance and transparency;
- (e) Any capacity-building interventions that may be required to deliver the activity;
- (f) Any communication and outreach activities that might be appropriate for the specific deliverable; and
- (g) Knowledge management to support assessments.

## **F. Conflict of interest policy**

37. UNEP has adopted codes of conduct that address conflict of interest issues for their staff. However UNEP has not established conflict of interest or disclosure policies for experts who serve on UNEP assessment teams. Other scientific assessments, such as the Millennium Ecosystem Assessment and the Global Biodiversity Assessment, have neither conflict of interest nor disclosure policies for their authors.

38. Because the individuals involved in the assessment process carry the burden and responsibility of maintaining the public's trust, it is important for all involved to act with transparency and integrity and to abide by appropriate codes of conduct. Public trust in science and the selection process also depends on effective communication. A conflict of interest policy will be developed as part of the final assessment procedures.

## **G. Inclusion of diverging viewpoints**

39. Identifying science and policy related contentious issues, where different viewpoints exist, will be the responsibility of the Coordinating Lead Authors, as well as the Reviewer Editors.

40. Assessments should describe different, possibly controversial, scientific, technical and socioeconomic views on a given subject, particularly if they are relevant to the policy debate.

41. Coordinating Lead Authors and Lead Authors should explicitly document in the assessment where a range of viewpoints around data, science and policies have been considered, and Coordinating Lead Authors and Review Editors should satisfy themselves that due consideration was given to properly document alternative views.

42. In preparing the first draft of an assessment report and at subsequent stages of revision after review, authors should clearly identify disparate views for which there is significant scientific, technical or socio economic support, together with the relevant arguments. Sources of uncertainty should be clearly identified, listed and quantified where possible. The implications for decision-making of the findings, including knowledge gaps, contrasting evidence and minority opinions, should be explicitly discussed.

43. Coordinating Lead Authors are required to record views that cannot be reconciled with a consensus view but that are, nonetheless, scientifically, technically or socioeconomically valid. Consensus does not imply a single view, but can incorporate a range of views based on the evidence.

44. If necessary, with guidance from the Scientific Advisory Panel, the assessment report may include in a footnote the differing views expressed in comments submitted by Governments during their final review of the document if these are not otherwise adequately reflected in the paper.

## **H. Peer review**

45. A peer review process is a means for ensuring the quality and relevance of the technical work. The review process also provides feedback on interim findings to users, and thus forms part of the on-going strategy of engagement and communication with users.

46. Transparent and rigorous peer review is necessary to achieve the highest scientific credibility possible. Three principles govern the review process: first, the reports should represent the best possible scientific, technical and socioeconomic data and information and be as balanced and comprehensive as possible. Second, as many experts as possible should be involved in the review process, ensuring representation of independent experts (i.e., experts not involved in the preparation of the chapter they are to review) from all countries. Third, the review process should be balanced, open and transparent and record the response to each major review comment.

47. The Communities of Practice will support a more inclusive peer review due to the greater number of participants and breadth of knowledge. Peer reviews using the Communities of Practice will be more transparent than traditional methods and allow stakeholders to openly comment and share opinions on data, information and assessments, as well as comment on other stakeholder's comments.

48. A targeted and effective process for responding to reviewer comments is an important requirement. In such a process, Review Editors would prepare a written summary of the most significant issues raised by reviewers shortly after review comments have been received. Authors would be required to provide detailed written responses to the most significant review issues identified by the Review Editors, abbreviated responses to all non-editorial comments, and no written responses to editorial comments.

49. In order to improve transparency, legitimacy and scientific credibility of the assessment, peer reviews of all outputs, including the regional, subregional and global assessments will be undertaken through intergovernmental and multi-stakeholder processes.

50. As much environmental information exists in non-peer reviewed forms the use of grey cannot be ignored, but a clearer definition of grey literature is needed. Grey literature includes government reports, technical reports, conference proceedings, statistics, observational data sets, and model output., which are not intended to be scientific publications, yet which contain relevant data and information, e.g. on national environmental trends or national reports to MEAs Secretariats. Another important source of information is provided by NGOs, many of whom compile very credible reports and statistics, but that are not published in journals.

51. Consideration of grey literature should be taken on a case-by-case basis, and should be accessible on the UNEP Live platform.

## **V. Conclusion**

52. There is a continuous need for UNEP to review and strengthen its procedures and guidance in relation to the assessment processes it undertakes or facilitates, resulting from feedback from governments and stakeholders and through formal evaluations of assessments both internal to UNEP and those conducted by external entities.

53. UNEP proposes to develop this draft set of procedures further in consultation with the scientific community, nationally recognized experts and shared with Member States for comment before being finalized ahead of the Global Intergovernmental Multi-stakeholder Consultation on GEO-6 that is scheduled for September 2014.

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