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Item 5 of the provisional agenda**

International environmental policy and governance issues

**Options for the future of the Global Environment Outlook:
final report of the steering committee on the future of the
Global Environment Outlook**

Introduction

1. In completion of the mandate provided to it by the United Nations Environment Assembly of the United Nations Environment Programme (UNEP) at its fourth session, in resolution 4/23, entitled “Keeping the world environment under review: enhancing the United Nations Environment Programme science-policy interface and endorsement of the Global Environment Outlook”, the steering committee on the future of the Global Environment Outlook (GEO) is pleased to submit the present report on options for the future of GEO to the Environment Assembly at its resumed fifth session. After nearly two years of deliberations, the steering committee has successfully analysed and presented options in the following areas:

- (a) Determining the overall orientation of GEO in terms of its objectives, functions, design criteria and process;
- (b) Establishing the governance and implementation structure for GEO;
- (c) Requesting that the chosen governance and implementation structure develop procedures, undertake assessments and address needs in capacity-building, knowledge generation and policy support;
- (d) Considering how best to resource and administer the GEO process to ensure its objectives can be delivered in a timely and cost-effective manner.

2. An accompanying resolution has also been drafted by certain Member States to allow the Environment Assembly, at the in-person meeting of its fifth session, to provide guidance or a decision on the future of GEO. The present report is meant to provide a rationale and supporting evidence to the Environment Assembly on the various elements in the draft resolution.

* In accordance with the decisions taken by the Bureau of the United Nations Environment Assembly at its meeting held on 8 October 2020 and by the bureaux of the United Nations Environment Assembly and the Committee of Permanent Representatives at their joint meeting held on 1 December 2020, the fifth session of the Environment Assembly was adjourned on 23 February 2021 and is expected to resume as an in-person meeting in February 2022.

** UNEP/EA.5/1/Rev.2.

I. Executive summary

3. The steering committee is providing the present final options document to the Environment Assembly to assist it in determining the future of GEO. The steering committee has worked over a two-year period, consulted Member States, stakeholders and assessment experts, and explored the approaches, alternatives, options and suggestions for the future of GEO as set out below and as further detailed in the steering committee's interim report to the Environment Assembly at the online meeting of its fifth session (UNEP/EA.5/24), the steering committee's feasibility study on the financial, administrative and collaborative consequences of the options for the future of the Global Environment Outlook (UNEP/EA.5/INF/26, annex) and the analysis of consultation process results (UNEP/EA.5/24, annex). Based on that work, the Environment Assembly may wish to take into consideration the following rationale and findings, which may inform the design of the future GEO process.

A. Rationale for the analysis of the future of GEO

4. The following elements formed the basis for the rationale for the analysis of the future of GEO:

(a) The need for UNEP to fulfil the science-policy mandate set out in General Assembly resolution 2997 (XXVII) of 15 December 1972, in particular to keep under review the world environmental situation; to promote the contribution of the relevant international scientific and other professional communities to the acquisition, assessment and exchange of environmental knowledge and information; and to provide policy guidance and recommendations;

(b) The role of credible, relevant and legitimate intergovernmental and expert-led assessments in promoting dialogue between the science and policy communities and in supporting decision-making on environmental issues, to achieve the transformation to a sustainable future as set out in the 2030 Agenda for Sustainable Development and its Sustainable Development Goals;

(c) That the GEO process, since its inception in 1995, has generated flagship reports, informed decision-making and contributed to key decisions of the Governing Council of UNEP and the Environment Assembly, and to the strengthening of the UNEP science-policy interface, including by mobilizing in-kind support from experts and partner institutions;

(d) Resolution 4/23, by which the Environment Assembly established a steering committee under its auspices to oversee the consultations for and preparation of the present options document and the interim options report on the future of the GEO process;

(e) The input received and prepared through the consultative process, as analysed in the interim options report submitted by the steering committee on the future of GEO.

B. Overall approach to the design of the GEO process

5. The objective of GEO is to keep the world environmental situation under review to periodically inform and support collective and individual action by United Nations Member States,¹ stakeholders and other actors, while strengthening the UNEP science-policy interface.

6. The aim of the GEO process is to achieve that objective through a set of mutually supportive functions comprised of undertaking intergovernmental and expert-led assessments and providing support to intergovernmentally agreed needs and terms for capacity-building, knowledge generation and policymaking.

7. The design of GEO should be guided by the principal criteria set out in the present options document for ensuring mandate consistency, relevance, legitimacy, credibility, accessibility, added value and overall feasibility.

8. The key steps in the intergovernmental and expert-led GEO process set out in the options document is vital to achieving the objectives, functions and principal design criteria for GEO.

¹ Collective action refers to action under multilateral environmental agreements and other environmental processes such as the 2030 Agenda and its Sustainable Development Goals.

C. Alternatives for the governance and implementation structures for the GEO process

9. Four common governance and implementation components could be achieved through three alternative approaches (labelled A1, A2 and B), under the auspices of the Environment Assembly, each with a differing level of authority:

(a) Open-ended meetings of representatives from Member States and accredited observers of the Environment Assembly, responsible for advising on or endorsing the process, as well as for planning, budgeting, initiating and clearing GEO assessments and other deliverables through:

- (i) Alternative A1 and A2: requesting the Executive Director of UNEP to convene ad hoc consultations and meetings to provide advice on the GEO process (as for the sixth report in the Global Environment Outlook series (GEO-6));
- (ii) Alternative B: establishing an ad hoc open-ended subsidiary body responsible for overseeing the GEO process;

(b) An advisory or executive (subsidiary) body responsible for presiding over the open-ended meetings, providing procedural, administrative and financial oversight and representing the GEO process, and with a balanced composition with respect to gender, geography and discipline.² The body could be established through:

- (i) Alternative A1: requesting the Executive Director to appoint an intergovernmental and multi-stakeholder advisory group (25-30 members) (as for GEO-6);
- (ii) Alternative A2: establishing an intergovernmental and multi-stakeholder (accredited observers) steering group (25-30 members), under the auspices of the United Nations Environment Assembly (as for the steering committee on the future of GEO);³
- (iii) Alternative B: requesting the subsidiary body to elect a bureau of government officials, possibly with representatives from observers (10–15 members);

(c) A multidisciplinary expert body responsible for presiding over expert meetings, providing scientific oversight, selecting experts, and representing the GEO process, with a balanced composition with respect to gender, geography and discipline. The body could be established through:

- (i) Alternatives A1 and A2: requesting the Executive Director to appoint a multidisciplinary advisory group (25 members) (as for GEO-6);
- (ii) Alternative B: requesting the subsidiary body to appoint a multidisciplinary expert panel (25 experts);

(d) The implementation structure, managed by the UNEP secretariat, could include:

- (i) Author teams of independent experts from all United Nations regions, with a proven publishing and research record, and a record of undertaking time-bound assessments in accordance with an approved scope (design), including using literature from all United Nations regions and in all United Nations languages;
- (ii) Task forces to guide the development and implementation of methodologies and the undertaking of functions other than assessments, such as capacity-building;
- (iii) Collaborative centres and technical support units provided by partner institutions outside UNEP to support specified time-bound assessments by author teams or expert-driven tasks.

² Members should have: (a) the ability to carry out the assigned responsibilities; (b) scientific environmental expertise in both natural and social sciences; (c) scientific, technical or policy expertise and knowledge of the main elements of the work of GEO; (d) experience in communicating, promoting and incorporating science into policy development processes; and (e) the ability to both lead and work in international scientific and policy processes.

³ Members of the steering group could be selected from nominations by Member States or members of United Nations specialized agencies, which would be assessed and approved by the Committee of Permanent Representatives to UNEP.

D. Approaches for developing procedures, planning, budgeting, scoping and conducting assessments, as well as supporting capacity-building, knowledge generation and policymaking

10. The Environment Assembly may wish to consider the assessment options (comprehensive, thematic and synthesis)⁴ or potential hybrid options and task the governance structure of GEO to:

- (a) Initiate a process for the establishment of a set of procedures, to be agreed by Member States, that reflects the objectives, functions, criteria and process set out above;
- (b) Develop a rolling work plan and time-bound budget and initiate the next GEO assessment to address identified needs, priorities and emerging issues, based on inputs from Member States, stakeholders and experts;
- (c) Identify the needs and terms for support for capacity-building, knowledge generation and policymaking, and for planning and budget services required to address those needs, in partnership with relevant institutions.

E. Administrative, collaborative and financial issues

11. The Environment Assembly may wish to request the Executive Director of UNEP to administer the GEO process, including by:

- (a) Providing adequate, predictable and stable financial resources from core funds, including the Environment Fund, by allocating sufficient human resources for the GEO secretariat and by fostering in-house contributions and expertise;
- (b) Facilitating partnerships with collaborating centres and assistance from technical support units;
- (c) Facilitating the mobilization of extrabudgetary resources for the process, including by establishing a dedicated trust fund, where appropriate.

II. Purpose and structure of the options document

12. The steering committee on the future of GEO, established as a subsidiary body by the United Nations Environment Assembly in its resolution 4/23, is pleased to provide the present final options document to the Environment Assembly to assist it in determining the future of GEO.

13. The report is structured so as to highlight the rationale for a decision on the preferred options for the future of GEO that the Environment Assembly may wish to consider, and so as to provide potential decision points for the Environment Assembly in four key areas related to:

- (a) Determining the overall orientation of GEO in terms of its objectives, functions, design criteria and process;
- (b) Establishing the governance and implementation structure for GEO;
- (c) Requesting that the chosen governance and implementation structure develop procedures, undertake assessments and address needs in capacity-building, knowledge generation and policy support;
- (d) Considering how best to resource and administer the GEO process to ensure its objectives can be delivered in a timely and cost-effective manner.

14. To assist the Environment Assembly in its decision-making, the steering committee has provided a more detailed analysis of the options and their implications, advantages and disadvantages in the present final options document. The report is supported by a detailed background paper (UNEP/EA.5/INF/18), the interim options report, the detailed feasibility study and the analysis of the results of two comprehensive consultations with Member States, stakeholders and assessment experts. The main supporting evidence from these supporting documents is referenced in the present final options document, where it is most relevant.

⁴ For greater clarity, these are: option 1: a comprehensive global integrated environmental assessment with regional specificity every four years; option 2: thematic assessments, as and when needed; and option 3: syntheses of relevant global assessments.

III. Rationale for a decision on the future of GEO

15. The United Nations Environment Assembly may wish, as part of the decision-making on the future of GEO, to be mindful of the science-policy mandate of UNEP, which is anchored in the core function assigned to the Governing Council of UNEP by General Assembly resolution 2997 (XXVII) of keeping the world environmental situation under review. That founding mandate also includes the function of promoting the contribution of relevant international scientific and other professional communities to the acquisition, assessment and exchange of environmental knowledge and information and the functions related to providing policy guidance and recommendations.

16. The Environment Assembly may also wish to recognize the role of credible, relevant and legitimate intergovernmental and expert-led assessments in promoting dialogue between the science and policy communities and supporting decision-making on vital environmental issues to achieve the transformation to a sustainable future as set out in the 2030 Agenda for Sustainable Development and its Sustainable Development Goals.

17. The role of the GEO process and its series of six previous comprehensive GEO assessments is summarized in part II of the steering committee's interim report and its accompanying background paper. In its first three publications GEO was an expert and partnership-based integrated assessment. The process has, since the fourth report in the GEO series, taken on the complex features of intergovernmental and expert-led assessments. The analysis of the results from the consultation in 2020 annexed to the interim report showed that a continuation of the GEO process was favoured by an overwhelming majority of Member States (114 out of 116, or 98 per cent), assessment experts (96 per cent) and stakeholders (94 per cent) that responded to the consultation.

18. The Environment Assembly may as part of the rationale for its decisions wish to recognize that the GEO process, since its inception in 1995, has generated flagship reports, informed decision-making and contributed to key Governing Council and Environment Assembly decisions while also strengthening the UNEP science-policy interface, including by mobilizing in-kind support from experts and partner institutions. It may also wish to recognize that a large proportion of Member States, stakeholders and assessment experts support the continuation of a GEO process.

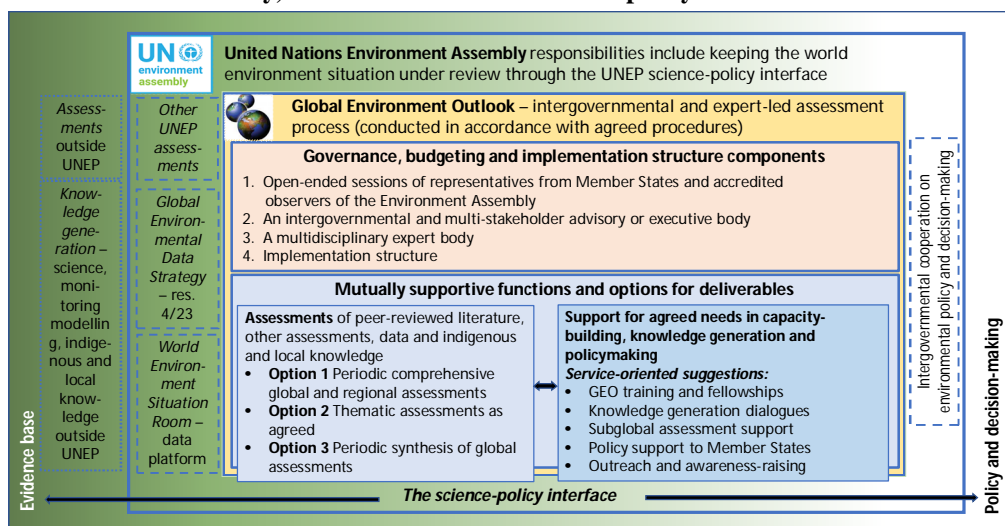
19. In considering the findings of the present report, the Environment Assembly may wish to recall its resolution 4/23, by which it established a steering committee, under its auspices, to oversee the consultations for and preparation of an options document on the future of the GEO process. It may also wish to welcome the input received through the consultative process.

IV. Overall approaches to the design of the future GEO

20. After significant deliberations, both in the preparation of the interim report and the feasibility study, the steering committee has developed a schematic (shown on p. 6) of the overall GEO process and how the proposed alternatives, options and suggestions fit within it. The schematic reaffirms that GEO is an intergovernmental and expert-led assessment process under the purview of the Environment Assembly, which is a key supporting element in the UNEP science-policy interface. The GEO process draws from an evidence base that includes the global environmental data strategy requested under resolution 4/23, the World Environment Situation Room, the Global Environmental Monitoring System, the work on Sustainable Development Goal indicators and statistics, the Global Learning and Observations to Benefit the Environment programme (GLOBE) and Global Resource Information Database (GRID) networks, the assessments led by UNEP and the United Nations, the body of peer-reviewed scientific literature, monitoring data, global and regional modelling efforts and other knowledge systems, such as indigenous and local knowledge.

21. The schematic reflects the proposal that the GEO process could take place in accordance with agreed procedures, which could be developed as proposed in section IV of the present document. The schematic presents the components and alternative approaches to the governance, budgeting and implementation structures that are further described and analysed in section V of the present report.

Schematic of alternatives, options and suggestions for the future of GEO as an intergovernmental and expert-led assessment process under the purview of the United Nations Environment Assembly, situated in the UNEP science-policy interface



22. Finally, the schematic presents options and suggestions related to the implementation of the enabling and mutually supportive functions of GEO, which enhance the assessment function and science-policy interface of UNEP through the provision of support to agreed needs in capacity-building, knowledge generation and policymaking. A new development compared to the interim report is that the service-oriented approach (option 3 in the interim report) is no longer considered as an independent option, but is now a set of enabling and enhancing service-oriented suggestions that would support all options presented under the assessment function. It should be noted that the assessment options are not necessarily mutually exclusive either, and that they could be conducted individually or in combination (hybrids). The steering committee considered that this reconfigured approach better reflected the options for the future GEO assessment process. This change from the previous interim report findings is consistent with the UNEP science-policy interface and with the science-policy interfaces of other assessment processes (e.g., the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services and the Intergovernmental Panel on Climate Change). The options and suggestions are further described and analysed in section VI below.

A. Future of GEO objectives and functions

23. Given the overwhelming support for the continuation of GEO, the steering committee suggests, in line with its interim report, that the GEO process should reflect the science-policy mandate of UNEP and have the following objective:

The objective of GEO is to keep the world environmental situation under review in order to periodically inform and support collective and individual action by United Nations Member States,⁵ stakeholders and other actors, while strengthening the UNEP science-policy interface.

24. The Environment Assembly may wish to affirm that objective and that the aim of the GEO process is to achieve it through a set of mutually supportive functions comprised of undertaking intergovernmental and expert-led assessments while providing support to intergovernmentally agreed needs and terms for capacity-building, knowledge generation and policy support. In performing this function, the GEO process would thoroughly review, analyse and synthesize existing knowledge by regularly undertaking credible, legitimate and relevant assessments of science and other information, with the intention of promoting informed and effective action on the environment by Governments and other stakeholders. The results of the future of GEO 2020 consultation process identified support for a robust status and trends analysis, cooperation with scenario- and model-development communities, strengthening of policy analysis, policy support, consolidated data-sharing, capacity-building in the science-policy interface and outreach to communicate assessment findings.

⁵ Collective action refers to action under multilateral environmental agreements and other environmental processes such as the 2030 Sustainable Development Agenda and its Sustainable Development Goals.

B. Principal criteria for the design of the future GEO

25. In conducting its analysis for the future of GEO, the steering committee identified seven principal criteria that should be met by future GEOs. Those criteria were presented in part III of the interim report and are also set out below:

- (a) Mandate consistency and comparability across editions of GEO;
- (b) The relevance (or salience) of GEO in terms of responding flexibly to the needs of Member States and stakeholders, for example on improving the effectiveness of environmental policy;
- (c) The legitimacy of GEO as an assessment accepted by Member States and stakeholders as authoritative, through unbiased, representative and defensible procedures, with team compositions that are balanced with respect to geography, gender and discipline;
- (d) The credibility of GEO as a robust and rigorous assessment based on scientifically accepted methods and analysis from multiple sources;
- (e) The accessibility of GEO, meaning that its outputs and the underlying knowledge base and environmental data are accessible by Member States and stakeholders to support policymaking, decision-making and strengthening of the science-policy interface;
- (f) The added value of GEO, in terms of ensuring that it responds to the mandate of UNEP and that it avoids duplication with other global assessment processes, while addressing interlinkages and cross-cutting issues and identifying gaps and emerging issues;
- (g) The overall feasibility of GEO, including continuity of operations for the periodic production of the report, in terms of the implications for administrative, financial and collaborative structures and other initiatives in the UNEP science-policy interface.

26. The Environment Assembly may wish to acknowledge that the design of GEO should be guided by the principal criteria set out above.

C. The intergovernmental and expert-led GEO process

27. The Environment Assembly may wish to recognize that the key steps in the intergovernmental and expert-led GEO process are vital to achieving the objectives, functions and principal design criteria set out above. These steps are set out in table 1 below.

Table 1

Key steps in the intergovernmental and expert-led GEO process

(a) **Planning and budgeting.** The GEO process would identify global environmental issues to be addressed on the basis of input provided by Member States and stakeholders. This would inform the development of a rolling work plan and time-bound budget considered or adopted (endorsed paragraph by paragraph), depending on the governance option chosen, by Member States for assessments and support to intergovernmentally agreed needs and terms for capacity-building, knowledge generation and policymaking.

(b) **Scoping of assessments** would be initiated by Member States based on a short pre-scoping document. The detailed scoping document would be drafted by independent experts and adopted (endorsed paragraph by paragraph) by Member States in dialogue with experts and in the presence of regional and global stakeholder observers. The document would determine the timing, the geographic and thematic coverage, the user needs, the target audience, the outline, the evidence base, the associated functions (capacity-building, knowledge generation and policy support), the size of the author team and the detailed time-bound budget. The scoping document would serve as a basis for a decision by Member States on whether to initiate the assessment or not.

(c) **The nomination and selection of experts.** Assessment author teams and expert task forces for other deliverables, with balanced compositions with respect to gender, geography and discipline, are selected through a credible process, preferably by a multidisciplinary oversight body. Experts would be selected on the basis of their merits and qualifications from nominations by Member States and relevant stakeholders.

(d) **Assessments of the state of knowledge** would be undertaken by a team of independent experts, with balanced compositions with respect to gender, region and discipline, acting in their personal capacity. They would undertake a policy-relevant collective and iterative review, synthesis, analysis, critical evaluation and judgement, including confidence levels, of available knowledge from existing assessments, peer-reviewed scientific literature and other relevant knowledge sources and knowledge systems.

Assessment drafts would be subject to review, consultation and clearance as outlined below. The summary for policymakers would highlight key messages and findings, with confidence statements and references to the analysis in the relevant chapters of the full report.

(e) **Review and consultations.** The draft assessment chapters and the summary for policymakers would normally be subject to at least one round of review by experts, governments and stakeholders. The review of the summary may also involve review and consultations with Member States and stakeholder observers.

(f) **Avoidance of conflicts of interest and treatment of errors.** Measures would ensure the disclosure and avoidance of conflicts of interest which would either significantly impair the individual's objectivity in carrying out his or her duties and responsibilities within the GEO process, or create an unfair advantage for any person or organization involved in the GEO process. Measures would also ensure that possible errors in assessment reports are investigated and rectified in a timely manner.

(g) **Clearance processes.** The summary for policymakers would be developed by a subset of authors of the assessment, be published in their name and be approved by Member States in a separate session under the auspices of the Environment Assembly (endorsed line by line), in dialogue with those authors and in the presence of stakeholder observers. A full assessment report, if prepared, would typically be accepted by Member States (in that case the material would not have been subjected to detailed discussion and agreement by Member States, but would nevertheless present a comprehensive and balanced view of the subject matter). Other deliverables such as full synthesis reports, strategies, plans, guides and tools would be cleared through adoption by Member States (endorsed paragraph by paragraph). The Environment Assembly may subsequently wish to endorse GEO products approved or adopted by Member States.

28. All the key steps set out in table 1 contribute to principal design criteria such as mandate consistency, accessibility, added value and overall feasibility of the GEO process. Steps (a), (b), (e) and (g) in the process in particular contribute to ensuring the relevance and legitimacy of GEO, while steps (c), (d), (e), and (f) are especially vital for the credibility of GEO. The alternative governance and implementation structures presented in section IV are also largely a function of the process. The process, furthermore, applies to all assessment options set out in section VI as well as the suggested capacity-building, knowledge generation and policy support functions in section VII. The resources needed for each of those key steps are essential for the costing and feasibility analysis of the assessment options and support functions presented in section VIII.

V. Alternative governance and implementation structures for GEO

29. The Environment Assembly may wish to establish a governance and implementation structure for GEO tailored to the key steps in the GEO process. In its interim report, the steering committee identified the alternative governance approaches set out in sections IV.A and IV.C below. To respond to the outcomes of the 2021 future of GEO consultation, an additional possible hybrid solution is described in section IV.B. A comparison of the common governance components and alternatives is presented in table 2. All three alternatives would be governed under the auspices of the Environment Assembly, either directly or through the management of the GEO process by the Executive Director of UNEP. The secretariat and implementation structure set out in section IV.D would be the same for all governance alternatives.

Table 2
Comparison of governance alternatives for the GEO process

<i>Common components</i>	<i>Alternative A1</i>	<i>Alternative A2 (hybrid)</i>	<i>Alternative B</i>
1. Open-ended meetings of representatives from Member States and accredited observers of the Environment Assembly responsible for advising on or endorsing the process, as well as for planning, budgeting, initiating and clearing GEO assessments and other deliverables (see table 1)	Ad hoc consultative meetings convened by the Executive Director of UNEP would generate advice (as for GEO-6)	Ad hoc consultative meetings convened by the Executive Director would generate advice (as for GEO-6)	Ad hoc open-ended subsidiary body established by the Environment Assembly (new)

<i>Common components</i>	<i>Alternative A1</i>	<i>Alternative A2 (hybrid)</i>	<i>Alternative B</i>
2. An advisory or executive body responsible for presiding over the open-ended meetings, providing procedural, administrative, and financial oversight and representing the GEO process. To be composed so as to ensure balance with respect to gender, geography and discipline ^a	An intergovernmental and multi-stakeholder advisory group (25-30 members) appointed by the Executive Director of UNEP (as for GEO-6)	An intergovernmental and multi-stakeholder (accredited observers) steering group (25-30 members) established under the auspices of the Environment Assembly (as for the steering committee on the future of GEO) ^b	A bureau of government officials, possibly with representatives from observers (10-15 members), elected by the subsidiary body (new)
3. A multidisciplinary expert body responsible for presiding over expert meetings, providing scientific oversight, selecting experts, and representing the GEO process. To be composed so as to ensure balance with respect to gender, geography and discipline ^c	A multidisciplinary advisory group (25 members) appointed by the Executive Director of UNEP (as for GEO-6)	A multidisciplinary advisory group (25 experts) appointed by the Executive director of UNEP (as for GEO-6)	A multidisciplinary expert panel (25 experts) appointed by the subsidiary body (new)

^a Members should have: (a) the ability to carry out the assigned responsibilities; (b) scientific environmental expertise in both natural and social sciences; (c) scientific, technical or policy expertise and knowledge of the main elements of the work of GEO; (d) experience in communicating, promoting and incorporating science into policy development processes; and (e) the ability to both lead and work in international scientific and policy processes.

^b Members of the steering group could be selected from nominations by Member States or members of United Nations specialized agencies, which would be assessed and approved by the Committee of Permanent Representatives to the United Nations Environment Programme.

A. Alternative A1: intergovernmental meetings convened and advisory bodies established by the Executive Director of UNEP

30. The Environment Assembly may wish to request the Executive Director of UNEP to continue to convene ad hoc open-ended consultative meetings of Member States and accredited observers to the Environment Assembly and establish advisory bodies for the GEO process. The open-ended consultative meetings would be akin to those convened for the fourth, fifth and sixth instalments of GEO. The meetings would work in accordance with Assembly rules of procedures and be responsible for the development and oversight of the implementation of GEO procedures (if so decided) and the intergovernmental oversight of the GEO process as set out in table 1. The Executive Director would be responsible for establishing an intergovernmental and multi-stakeholder advisory group on managerial issues⁶ and a multidisciplinary advisory panel for scientific oversight, akin to those set up for the sixth instalment.⁷ Both bodies would strive to ensure a balanced composition with respect to discipline, gender and geography across the five United Nations regions.

B. Alternative A2 (hybrid): a steering group akin to the steering committee on the future of GEO

31. A variation of alternative A1 which also could serve as a hybrid between alternatives A1 and B could be to establish a steering group akin to the steering committee on the future of GEO to provide intergovernmental oversight for the process and to preside over the open-ended consultative meetings of alternative A1. Such a steering group would be established under the auspices of the Environment Assembly and could replace the intergovernmental and multi-stakeholder advisory group and work alongside the multidisciplinary science advisory panel proposed in alternative A1. The members of the steering group could be selected through a number of processes, including from nominations by Member States or members of United Nations specialized agencies, which would be assessed and approved by the Committee of Permanent Representatives to the United Nations Environment Programme.

⁶ Composed of 25 to 30 high-level government representatives from all five United Nations regions, as well as 8 to 10 key stakeholders.

⁷ Composed of 25 distinguished scientists.

C. **Alternative B: a standing ad hoc open-ended subsidiary body for GEO under the United Nations Environment Assembly**

32. Alternatively, the Environment Assembly may wish to establish a standing ad hoc open-ended subsidiary body of Member States and accredited observers that would be responsible for overseeing the role of GEO in the UNEP science-policy interface. The body would be acting as a subsidiary decision-making body of the Environment Assembly in accordance with Environment Assembly rules of procedure and be responsible for developing and overseeing the implementation of GEO procedures (if so decided) and the intergovernmental oversight of the GEO process as set out in table 1. The body would assume the functions performed by the Member States and experts attending open-ended intergovernmental consultative meetings convened for the fourth, fifth and sixth instalments of GEO as reflected in alternatives A1 and A2.

33. The subsidiary body would elect officers from each United Nations region to form its bureau. It could have representation from among key stakeholders if so decided. The subsidiary body would also establish a multidisciplinary expert panel that could consist of a limited number of independent experts from each United Nations region tasked with providing scientific oversight. The membership of the bureau and the panel would be selected with a view to ensuring a balanced composition with respect to discipline, gender and geography across the five United Nations regions. The bureau and the expert panel would work together to provide oversight of the implementation of the GEO process set out in table 1, in accordance with agreed procedures (if established). The bureau and the expert panel would undertake roles similar to those fulfilled by the high-level intergovernmental and stakeholder advisory group and the science advisory panel of GEO-6.

D. **The secretariat and implementation structures**

34. Both alternatives and their hybrid would be supported by a secretariat. The Executive Director of UNEP would provide the secretariat for future GEO processes as part of the UNEP science-policy interface. The secretariat would provide the technical support needed for the chosen governance and implementation structure that would be set out in the GEO procedures (if developed), including supporting the evidence base,⁸ day-to-day management and administration of the processes, budgets and funds needed for the implementation of the GEO process and procedures.

35. The chosen governance and implementation alternative could, in addition, make use of all or some of the following implementation structures (whose financial and administrative implications are considered in section VI below):

(a) Author teams of independent experts from all United Nations regions and with a proven publishing and research record, and a record of undertaking time-bound assessment processes in accordance with an approved scope (design), including using literature from all United Nations regions and in all United Nations languages. Teams would normally consist of one or more co-chairs, a number of coordinating lead authors, lead authors, and contributing authors, review editors and reviewers;

(b) Task forces to guide the development and implementation of methodologies and the undertaking of functions other than assessments, such as capacity-building;

(c) Collaborative centres and technical support units provided by partner institutions outside UNEP to support specified time-bound processes for author teams or expert-driven tasks. Collaborative centres would normally be commissioned and funded by the UNEP secretariat, while technical support units would normally be supported financially by Member States but work under the supervision of the UNEP secretariat. Technical support units would provide in-kind support to the assessment process, including support for identifying peer-reviewed literature in other United Nations languages, but could also receive agreed financial support from other sources.

E. **Implications, advantages and disadvantages**

36. The governance alternatives and implementation structures would be key to implementing the procedures and achieving the criteria set out in section III.B above. Alternative B, and to a somewhat lesser extent the possible hybrid solution in alternative A2, may, as subsidiary bodies of the

⁸ This includes peer-reviewed literature, national peer-reviewed assessments, assessments led by UNEP and the United Nations, the World Environment Situation Room, and elements of knowledge generation within and outside of UNEP, including the Global Environmental Monitoring System, work on Sustainable Development Goal indicators and statistics, as well as key partnerships with the GLOBE and GRID networks, as part of the global environmental data strategy of UNEP.

Environment Assembly, have a higher standing than advisory bodies established by the Executive Director of UNEP, and therefore better fulfil criterion (c) on legitimacy. Alternative B may, as a standing body, offer more continuity than alternative A1 and therefore better meet criterion (a) on mandate consistency and comparability.

37. The two alternative approaches (A1 and B) and the hybrid (A2) all involve the use of intergovernmental and stakeholder meetings in combination with expert meetings, and therefore would be quite similar in terms of financial implications. Costs would mainly include supporting meeting preparations. The costs of the operation of both approaches would depend on the size and frequency of meetings and the financial and administrative implications of options related to the scope, utility and timing of assessments (considered below in section VI). Member States and partners may also opt to host meetings and contribute to reducing overall costs. The annual cost estimate for the common governance components for all alternatives is \$270,000 for intergovernmental oversight and scientific oversight (see table 3).

VI. Establishment of agreed GEO procedures

38. The steering committee noted in its interim report that the Environment Assembly may wish to initiate a process for the establishment of a set of procedures, agreed by Member States, based on experience from past GEO processes and other relevant processes. The GEO-6 process was for instance guided by documents prepared by the secretariat on scientific credibility and by the Scientific Advisory Panel on drafting processes and the use of confidence statements. The development of agreed GEO procedures was generally favoured in the 2020 consultation. The steering committee has conducted initial work on a set of procedures as a resource for its analysis. This work reflects the proposed objectives, mutually supportive functions, principal design criteria and intergovernmental and expert-led process outlined in section III above. The work is based on current GEO practices as well as elements from agreed procedures in the Intergovernmental Panel on Climate Change and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. This is in anticipation of future cooperation with other such assessment processes.

39. These procedures could primarily reflect the objectives, functions, principles, structures and intergovernmental aspects of the planning, scoping, review and clearance processes of GEO. Such a set of agreed procedures could be complemented by technical guidelines, in line with the approach in previous GEOs. The guidelines could cover aspects such as nomination and selection of experts, preparation of materials, assessment of confidence and how to address possible errors and conflicts of interest.

40. The procedures would need to be agreed by representatives of Member States with expertise in such matters, through a process possibly involving reviews and consideration at intergovernmental meetings dedicated to the task. The procedures would have to be tailored to the directions set out by the Environment Assembly on the overall approach, governance and implementation structures, assessment options and other approaches for GEO. The existing draft compilation by the steering committee could be used as a resource for tailored input to such a process to develop procedures.

Implications, advantages and disadvantages

41. The financial, administrative and collaborative consequences of the preparation of draft procedures for consideration by Member States are considered moderate, given that initial work building on existing intergovernmental practices and agreed language has already taken place. However, there would be costs associated with a review and associated intergovernmental meetings of Member State experts for the consideration of the procedures. As such, the Environment Assembly may wish to task the governance and implementation structure of a future GEO with the further development of these procedures. Such considerations could be undertaken alongside other tasks and could therefore be incorporated into costs associated with the governance and implementation structure (see section IV.E above). Member States may need two meetings to reach agreement on the GEO procedures. Member States may in the interim decide that the GEO process be guided by preliminary work on the procedures already developed by the steering committee.

VII. Assessment options

42. The results of the broad consultation process in 2020, presented in the interim report, found a wide range of issues which could typically be included within the scope of GEO assessments, including:

- (a) Analysis of environmental status and trends, including projected environmental changes;
- (b) Progress towards internationally agreed environmental goals and targets;
- (c) Current and projected risks to human well-being from environmental change;
- (d) Impact of environmental change on the implementation of the Sustainable Development Goals;
- (e) Interlinkages across scales and geographic regions;
- (f) Policy gaps in meeting internationally agreed environmental goals;
- (g) The effectiveness of policy responses in differing developmental contexts;
- (h) Potentially successful policy approaches, with examples of how scarce resources can be mobilized;
- (i) Actions and policy options needed in the transformation to a sustainable future.

43. More specifically, the GEO assessments, as the flagship report for UNEP, should provide input to Environment Assembly resolutions and decisions such as on the UNEP medium-term strategy, to the high-level political forum on sustainable development, to the Global Sustainable Development Report, and to resolutions and decisions of multilateral environmental agreements, relevant regional bodies and individual Member States. The assessments could analyse and integrate evidence from existing science, data and knowledge, and findings from other relevant assessments, including information from other knowledge systems such as indigenous and local knowledge, to address the environmental issues of concern.

44. The assessments would follow the process described in table 1 on the scoping, nomination and selection of authors, the preparation and review of assessment drafts and the clearance of the summary for policymakers.

45. The estimated costs for the three assessment options are summarized in table 3, where they are combined with the anticipated costs for governance and implementation as well as any supportive functions that may be requested. It should be noted that the precise costs would be dependent on the planning and scoping of each assessment.

A. Option 1. Comprehensive global integrated environmental assessments, with regional specificities, every four years

46. The comprehensive global GEO assessment with regional specificities option is characterized as follows:

(a) Scope: the scope could in principle address the broad range of issues presented above as pertaining to all assessment options and be undertaken every four years. The global and regional dimensions would be addressed as agreed in the planning and scoping stage of the GEO process either as:

- (i) A global assessment where the regional aspects are integrated in the analysis;
- (ii) A global assessment where the regions are assessed in separate chapters or sections as has happened for past GEOs;
- (iii) A staggered approach of separate comprehensive regional assessments followed by a comprehensive global assessment, as for GEO-6;

(b) Evidence base: existing assessments, scientific literature, grey literature, data, models and scenarios, national reports and other knowledge systems, such as indigenous and local knowledge that are relevant to the agreed scope.

B. Option 2. Thematic assessments, as and when needed

47. The thematic GEO assessment option is characterized as follows:

(a) Scope: the scope could in principle address thematic environmental issues, communicate the science of GEO to specific actors (e.g., youth, cities and business) or improve guidance on methodological aspects of the broad range of issues presented above as pertaining to all assessment options. It would address issues not covered by existing intergovernmental assessments. For example, an assessment of the environmental impact of the coronavirus disease (COVID-19)

pandemic or new emerging issues which may need consideration. Regional aspects would normally be integrated in the global analysis. A thematic assessment may typically take two years to produce.

(b) Evidence base: existing assessments, scientific literature, grey literature, data, models and scenarios, national reports and other knowledge systems, such as indigenous and local knowledge that are relevant to the agreed scope.

C. Option 3. Syntheses of global assessments

48. The option in which GEO periodically synthesizes the findings of relevant assessments is characterized as follows:

(a) Scope: the scope could in principle address the broad range of issues identified above as pertaining to all assessment options but in practice be determined by the scope of existing relevant assessments and their interlinkages, and could be supplemented by additional analysis, working with the other assessment bodies as needed. Regional aspects would normally be integrated into the global analysis. A synthesis may typically take two years.

(b) Evidence base: primarily the use of existing assessments with the limited use of additional high-impact scientific literature to update or complement the analysis, as relevant to the agreed scope.

D. Implications, advantages and disadvantages

49. A comparison of options is presented in table 3. All options would follow a process which is key to ensuring that the assessments are relevant, legitimate, and credible (criteria b, c and d) as explained in section III.B. The options meet the other principal criteria for the design of the future GEO in the following manner:

50. Mandate consistency: All options would be consistent with the mandate of the Environment Assembly though they would differ in the coverage and scope of their analysis of environmental issues. The scope and process of option 1 (comprehensive) would be similar to earlier comprehensive GEO assessments, which would ensure comparability across editions of GEO. Option 2 (thematic) would be similar to previous GEO thematic processes (e.g., the Global Gender and Environment Outlook) but with a full summary for policymakers. A number of thematic assessments have been produced under the GEO banner but none of them have been intergovernmental and expert-led assessments. Option 2 (thematic), due to limited coverage, and option 3 (synthesis), due to dependence on available assessments, may address the Environment Assembly mandate somewhat less comprehensively and make GEO less comparable with previous instalments. However, assessments under option 2 (thematic) and option 3 (synthesis) could be planned to complement each other in support of the Environment Assembly mandate. In addition, the synthesis approach in option 3 could be scoped to include information beyond existing assessments.

51. The added value of GEO: All options would follow a process which ensures that GEO responds to the UNEP mandate, and that it avoids duplication with other global assessment processes, while addressing interlinkages and cross-cutting issues and identifying gaps. Option 1 (comprehensive) would be well placed to address the interlinkages across environmental issues. It would draw on findings of other assessments for its content and avoid duplication through careful scoping, implementation, use of authors familiar with other assessments as well as interaction and communication with other assessment processes. Option 2 (thematic), in focusing on filling gaps and emerging issues, would be well placed to complement the broader body of existing assessments. Option 3 (synthesis) would amplify the findings of other assessments and add value by addressing their interlinkages and presenting them in a broader context, supported by high-impact peer-reviewed literature, as agreed.

52. The accessibility of GEO: All options would help ensure that GEO outputs and the underlying knowledge base and environmental data are accessible by Member States and stakeholders, though, depending on the scoping, option 1 (comprehensive) might address accessibility by providing comprehensive information, while options 2 (thematic) and 3 (synthesis) would do so by being more focused and targeted. The scoping process for the assessment and the clearance process for the summary for policymakers under all options help enhance accessibility of assessment findings and support policymaking, decision-making and the science-policy interface. Assessment findings and the underlying knowledge base and environmental data can, under all options, be made available on the World Environment Situation Room and other similar platforms and be complemented by dynamic infographics and accessible near real-time data updates and horizon scanning analysis.

53. The overall feasibility of GEO: All options would ensure the continuity of operations for the periodic production of the GEO report, as well as for the administrative, financial and collaborative structures and other initiatives in the UNEP science-policy interface. Option 3 (synthesis) and to some extent option 2 (thematic) would imply a leaner process and downscaled operation compared to option 1 (comprehensive) and consequently be less expensive than option 1 (see table 3). The contribution of the options to the continuity of operations for the periodic production of the report would be contingent on planning. The cost differences across the options would vary according to the agreed scope and planned frequency of assessments.

Table 3
Costing and comparison of the three assessment options (in United States dollars)

<i>Option and preparation time</i>	<i>Annual assessment preparation cost</i>	<i>Annual governance costs</i>	<i>Annual costs for capacity-building, knowledge generation and policy support</i>	<i>Total annual cost</i>	<i>Total cost, taking into account duration</i>
1) Comprehensive global and regional integrated environmental assessment with regional specificities (three-year process)	2.68 million ^a	135,000 for intergovernmental meetings and 137,200 for expert oversight	900 000	3.85 million	11.55 million
2) Thematic assessments (as and when needed (two-year process))	2.57 million ^b	135,000 for intergovernmental meetings and 137,200 for expert oversight	900 000	3.74 million	7.48 million
3) Synthesis of global assessments (two-year process)	2.18 million ^c	135,000 for intergovernmental meetings and 137,200 for expert oversight	900 000	3.35 million	6.7 million

^a Based on a scenario similar to GEO-6. Cost elements include: one expert scoping meeting and four author meetings, stipends, partnership agreements, software licences, communications, digital platform, document production, layout and translation.

^b Based on a scenario of a thematic assessment for COVID-19. Cost elements include: one expert scoping meeting, three author meetings, stipends, partnership agreements, software licences, communications, digital platform, document production, layout and translation.

^c Based on a scenario in the UNEP report entitled “Making peace with nature: a scientific blueprint to tackle the climate, biodiversity and pollution emergencies”. Cost elements include: one expert scoping meeting, two author meetings, stipends, partnership agreements, software licences, communications, digital platform, document production, layout and translation.

All amounts from these scenarios have been calculated in the costing exercise and spreadsheet reviewed by the steering committee and are based on approximations from past GEO processes, governance models and capacity-building efforts.

54. All assessment options could be combined with the other options, as hybrids and as assessments which complement one another.

55. The Environment Assembly may therefore wish to consider the above assessment options or potential hybrid options and task the governance structure of GEO to develop a rolling work plan and time-bound budget and initiate the next GEO assessment to address identified needs, priorities and emerging issues, based on inputs from Member States, stakeholders and experts. Such a plan would also be instrumental in identifying and addressing the need for supporting functions as identified below. The provision of such supporting functions in capacity-building, knowledge generation and policymaking is key to meeting the broader science-policy needs of Member States and for the design of the intergovernmental and expert-led GEO assessment process, while strengthening the foundations of GEO over the longer term.

VIII. Capacity-building, knowledge generation and policy support functions

56. The analysis conducted by the steering committee and the broad consultations identified that GEO, in addition to its assessment function, would also encompass enabling and mutually supportive functions, namely, support to agreed needs in capacity-building, knowledge generation and policymaking. A key function of the GEO process is to facilitate the identification of the needs of Member States and agree on how they could be best supported through GEO itself or through other processes within or outside UNEP. The exact needs may depend on the assessment option or combination of assessment options chosen by the Environment Assembly.

57. The Environment Assembly may wish to request that the chosen governance and implementation structure identify the needs and terms for capacity-building, knowledge generation and policy support functions and to plan and budget activities for addressing those needs in partnership with relevant institutions. Consequently, GEO would build on the experience from past GEO processes and other initiatives to initiate the development of an approach for identifying needs, as well as a service-oriented approach for addressing those needs in accordance with the GEO process elements set out in table 1. Suggestions for such an approach include the following activities:

- (a) Integrating capacity-building in the GEO process through fellowships, training, exchanges, dialogues and consultations;
- (b) Working with partners to address capacity-building and support needs in the science-policy interface outside the GEO process, including through supporting subglobal assessments;
- (c) Undertaking dialogue with research, modelling, scenario and data communities to address knowledge generation needs identified in GEO processes;
- (d) Working with indigenous and local communities on the generation and use of indigenous and local knowledge;
- (e) Identifying tools and approaches for using GEO findings in support of policymaking, as requested by Member States and stakeholders;
- (f) Conducting outreach and awareness-raising (including supporting products).

It is estimated that the annual cost of a range of such activities could be \$900,000, as detailed in the feasibility study (see analysis in the feasibility study set out in the annex to document UNEP/EA.5/INF/26). This approach to providing these support functions would add value to and not duplicate other initiatives and would be coordinated closely with them. The GEO process would support – and collaborate with – other global environmental assessments, likely through the ad hoc global assessments dialogue,⁹ in developing shared tools and data platforms, including conceptual frameworks, scenarios and integrated models, to promote synergies across assessments and to support capacity-building.

Implications, advantages and disadvantages

58. The provision of the above support functions is key to meeting the criteria, in particular on mandate consistency, added value and the overall feasibility of GEO (criteria a, f and g). Capacity-building in the assessment process is essential for ensuring that the assessments are legitimate, relevant, credible and accessible (criteria b, c, d and e). Capacity-building to meet agreed needs for enhancing the science-policy interface more generally also helps strengthen the foundations of the GEO process, as does dialogue on knowledge generation, which is also critical for the long-term relevance and credibility of assessments (criteria b, and d). Outreach, awareness-raising and provision of agreed policy support are key to enhancing the impact of the GEO process, by supporting the relevance and accessibility of the assessments (criteria b and e).

⁹ See <https://www.unep.org/global-environment-outlook/adhoc-global-assessments-dialogue>.

IX. Administrative, collaborative, and financial issues

59. Typically, the largest cost elements for producing intergovernmental and expert-led assessments are:

- (a) Salaries for secretariat staff;
- (b) Disbursements to cover intergovernmental and expert meetings;
- (c) Costs for substantive and expert support during the assessment process.

60. A summary of estimated costs associated with governance and implementation of the intergovernmental and expert-led GEO assessment process is available in the feasibility study for ease of comparison. For these costs, UNEP is able to provide \$1–\$1.2 million per year from core funding¹⁰ to support the GEO secretariat.^{11, 12} However, the analysis conducted by the steering committee in its feasibility study identified the annual resource mobilization needs, over and above core funding, to be in the range of an additional \$2.3 million–\$2.9 million per year. These amounts will be dependent on decisions on the rolling work plan.

61. The Environment Assembly may wish to request the Executive Director of UNEP to administer the GEO process, including by providing adequate, predictable and stable financial resources from core funds, including the Environment Fund, by allocating sufficient human resources to the UNEP secretariat, fostering in-house contributions and expertise, facilitating partnerships with collaborating centres and assistance from technical support units, and where appropriate by facilitating the mobilization of extrabudgetary resources for the process, including by establishing a dedicated trust fund to support the implementation of the GEO process in accordance with a time-bound budget agreed by Member States.

62. It should be noted that the above investments typically result in the following immediate types of administrative benefits and returns:

- (a) Investments in expert processes such as GEO generate pro bono in-kind contributions from about up to 1,000 experts, from government representatives and potentially also from partner institutions contributing directly to the assessment process. These in-kind contributions have been estimated to be in the same order of magnitude as the direct costs of the assessment process, providing an immediate return on initial investments;
- (b) Investments in ensuring credibility, relevance and legitimacy, including visibility, in the GEO process, enhance dialogue between science and policy communities on issues vital for the substantive and political role the Environment Assembly is playing as the authoritative voice on the world environment. This return on investment is critical for the standing of the Environment Assembly in the international environmental governance architecture;
- (c) Investments in policy-relevant assessment products and processes promote knowledge generation and support actions for the transition to a sustainable future. Such a transition is critically dependent on enhanced knowledge and understanding of how society can restore and respect Earth's finite capacity to support human well-being.

Implications, advantages and disadvantages

63. Planning, budgeting and scoping are key to the predictability of funding, the stability of the process, ensuring cost savings, for maintaining the GEO community and for ensuring the above returns on investment. The establishment of a time-bound budget and work plan agreed by Member States, through the governance and implementation structure, and a dedicated trust fund for GEO, would allow the collection of voluntary contributions from a wide range of donors, thereby providing stability and predictability of funding before each assessment process starts. This would allow the assessment process to be clearly planned in advance, resulting in reduced travel and meeting costs, while dates for the delivery of the assessment could be clearly planned and supported by sufficient communication and outreach efforts.

¹⁰ Core funding includes funding from regular budget, Environment Fund and predictable extrabudgetary resources.

¹¹ This includes salaries for extrabudgetary staff and other reporting costs.

¹² In addition, salaries for regular UNEP staff are funded from the regular budget and the Environment Fund.