



Joint Scientific Advisory Panel (SAP) and Review Editors (RE) Meeting for the Sixth Global Environment Outlook - Outcome Document

The SAP met in Cairo from October 9-11, 2018 to review the results of the review editing process and approve the scientific credibility of the GEO-6 process. The Scientific Advisory Panel worked to achieve the following objectives:

Provide guidance to the Review Editors

1. To provide advice to the Review Editor's team on:
 - Controversial issues
 - Presentation of findings, messages, key conclusions
 - Main issues arising from the third-order-drafts (TOD) review
2. To comment on the robustness of the peer review process, provide guidance on the key issues raised in the TOD peer review report and recommend improvements for future GEO-6 peer review processes

Evaluating the scientific credibility of GEO-6 process

3. To establish the effectiveness of addressing the recommendations and decisions of the Scientific Advisory Panel by the secretariat and experts
4. To discuss and agree on the criteria for decision making on the scientific integrity of the GEO-6 process
5. To discuss and evaluate the scientific integrity of GEO-6 process
6. To draft the Scientific Advisory Panel opinion on the scientific integrity of the GEO-6 process

Discussion learnings for future GEOs and other assessment processes

7. To recommend improvements for the overall GEO process for consideration in future assessments; and
Identify mechanisms for ensuring scientific integrity for GEO and other major UN Environment assessments.

In these issues the Scientific Advisory Panel decided (quorum reached):

- the GEO-6 process has followed the basic principles of scientific credibility.
- A letter from the SAP to the Chief Scientist will be send with this opinion and with all criteria mentioned below analysed.

- the GEO is different from the IPCC and IPBES processes, as it also brings on board policy-makers early on into the process and then into SPM drafting process.
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- Communication and outreach is increasingly important. It should have equal weight with the scientific process, and it should come earlier into the GEO's process to better identify and then engage stakeholders.
- Future GEO's should complement, consolidate and analyse the findings emerging from other major global assessments such as IPCC or IPBES, as well as of other major reports produced by UN Environment (e.g. Emission Gap Report).
- The SAP agreed that, although the budget situation of the GEO-6 process was challenging, the scientific credibility of the GEO-6 process was not adversely affected.
- Following the presentation by the consultant, David Annandale, on the methodology and initial thoughts for the 'Future of GEO scoping study', the SAP also discussed options as to how to contribute to the development of the concept for the future of the GEO.

Meeting Summary

On day one, opening remarks were made by Egyptian Ministry of Environment representative, Permanent Undersecretary Dr. Manal Tantawy, CEDARE director H.E. Dr. Nadia Makram Ebeid, GEO-6 co-chair Paul W. Ekins, SAP co-chair Nicholas King, and by Mr. Edoardo Zandri from UN Environment. After thanking the Egyptian Ministry of Environment and CEDARE for hosting the meeting, the Secretariat provided an introduction outlining the objectives of the joint SAP and review editors' meeting, clarifying the agenda for the following days.

The Review Editors team made presentations to the SAP on the management of the review editing process for the GEO-6. They also demonstrated the READ Portal, which was used for the management of the review process and illustrated the review editors' achievements during their previous days' meeting.

The Review Editors individually presented brief summaries and analysis of their key findings and observations, chapter by chapter. The acceptance rate of comments by authors was between 60-70% with some chapters having a slightly lower acceptance rate. The rationale for the rejections of comments was provided by authors in most cases. The SAP emphasized the importance of ensuring the reviewer comments related to scientific integrity were addressed.

The final plenary discussion between the SAP and Review Editors focused on the excellent work of the Review Editors, acknowledging the complexity of dealing with such a significant number of comments within tight timelines. Over the following days the SAP expressed their intent to review some of the specific issues that were mentioned in the Review Editor's presentations to ensure they were satisfied with the rigour of the peer review process.

The Secretariat then presented the criteria for decision making on the scientific credibility of the GEO-6 process and provided the supporting information in response to the questions related to each criterion. Discussion on three of the seven of criteria was completed on the first day covering issues of "A robust peer review process," "Geographic and gender balance" and "Nomination and selection of experts" (criteria 4, 1, 2, respectively).

On day 2, The Secretariat continued to presented the remaining criteria which included "The scientific integrity of the process to prepare the SPM," "Implementation of decisions and guidance from the

Scientific Advisory Panel,” “Process execution” and “GEO-6 funding and medium-term evaluation” (criteria 5, 3, 6, and 7). After the Secretariat’s presentations, the SAP broke into working groups to develop their draft responses to be included in the SAP’s opinion letter, stating their evaluation against each criterion and whether scientific credibility was maintained for that criterion. These responses were then reviewed in plenary by the whole SAP.

On day 3, the SAP read through and edited the expert opinions drafted following the sequence of seven criteria. It was decided that descriptions of each criteria should be made more concise. All opinions were discussed and then confirmed by the SAP members to support the evaluation letter that would be sent to the Chief Scientist of UN Environment. The draft letter was then left with the SAP co-chairs SAP for further editing and it was agreed that it would be finalized in the following days before being sent for review and adoption by the entire Panel, before being sent to the Chief Scientist.

The final session discussed the future of GEO. The Panel discussed two Secretariat presentations and also with the David Annandale, the consultant working on the scoping study. The discussion covered the comparison between previous GEOs and the current GEO and the scoping for a future of GEO. The SAP agreed to liaise with the consultant and the Secretariat to contribute advice and suggestions for improvements to future GEO processes, and to help identify mechanisms for strengthening future assessments. The closing remarks were given by the co-chairs of the SAP, indicating their great appreciation to all the secretariat staff, CEDARE staff and the review editors for their support and their thanks for a successful meeting.

Annexes

Annex 1. Draft Letter from the SAP to the Chief Scientist

11 October, 2018

Ref: scientific credibility of the sixth Global Environment Outlook

Dear Jian Liu,

The Scientific Advisory Panel (SAP) is pleased to present the outcome of our review on the scientific credibility of UN Environment's most recent flagship report, the sixth Global Environment Outlook (GEO-6). In accordance with our mandate, the Panel's review has concluded that, overall, the process to produce GEO-6 was scientifically credible. In particular, the extent and scope of the peer review process, the geographic and gender balance of the community of authors and advisory groups, and the extent to which the Secretariat adopted the guidance of the advisory bodies, was impressive.

In conducting our review, the Panel agreed on a set of criteria with which to assess the scientific credibility of the GEO-6 process. Our conclusions based on these criteria are summarised below.

Overall GEO-6 process: The process for delivering GEO-6 was conducted in a manner that ensured scientific credibility. Whilst the sequencing of parts A, B and C resulted in the latter sections having less time and opportunity for authors' interactions and review, the SAP recognises the efforts made by the Secretariat and other participants to accommodate changes to timelines and work plans as dictated by external constraints, and in response to the evolving guidance of the advisory bodies.

Implementation of SAP Decisions & Guidance: The SAP's decisions and guidance were implemented in a timely and effective manner and resulted in the strengthening of the scientific credibility of the assessment. However, the SAP records that the initial guidance regarding drafting the SPM was amended by the HLG (see below). In addition, though SAP emphasized its importance from the outset, a comprehensive outreach and communications strategy for GEO-6 is yet to be developed and implemented.

GEO-6 Resources: The scientific integrity of the GEO-6 process was secured despite the limited budget. The SAP continuously stressed that the instability of financial resources introduced unnecessary tension and uncertainties, and that adequate committed resources (e.g. comparable to other global assessments) from the outset would have enhanced the stability and credibility of the GEO-6 process.

However, these risks were mitigated through strong in-kind support from the GEO expert community, combined with timely financial contributions from some member states, which helped to maintain a credible process. These efforts were complemented by adaptive management decisions and adjustments from the Secretariat (which in many cases was informed by SAP advice).

Geographic & Gender Balance: The geographic and gender distribution of participants (56/44) in GEO-6 was appropriate for a global assessment. Overall the geographical representation was 56% from developing countries and 44% from developed countries, while the overall gender balance was 55%

female and 45% male. The SAP recognises that this wide participation was achieved through the ongoing efforts of the Secretariat, in consultation with the SAP, at key points in the process.

Breadth of Expertise: The SAP determined that the process of nominating and selecting experts followed best practice principles. A total of 117 authors participated in the report drafting process. The SAP notes that it was challenging to recruit a sufficient number of authors representing the breadth of skills and expertise required within the short time allocated. During the drafting period additional experts were brought in to fill skills gaps identified by the SAP, and in consultation with the Secretariat, assessment co-chairs and the coordinating lead authors.

Pending final TOD report from review editors

Peer Review Process: Overall, a robust peer review process that was transparent, inclusive, and rigorous was undertaken for GEO-6. Integrity was enhanced by following best practice principles. The SAP recognizes the excellent work of the Review Editors in conducting this robust process, in particular the development of the online Review Editors Analytical Database (READ) tool, which will be useful for other review processes. That being said, the SAP is of the opinion that the traceability of responses by authors could have been strengthened and that the SPM would have benefitted from wider review.

Drafting of the SPM: The SPM is consistent with the primary document, as evidenced by 'line-of-sight' referencing of each statement to its parent sections in the main report. The SPM also provides confidence statements for all the key messages, reflecting the extent of the evidence on which they are based.

Whilst the HLG took leadership of the SPM development from the outset, the SAP provided guidance stressing the necessity for the authors and GEO-6 Co-Chairs to produce the first draft. This approach was agreed at the 3rd authors meeting (Guangzhou, October 2017) and from there-on the HLG provided guidance to the assessment co-chairs and authors for further revisions to the draft SPM. The SPM was thus developed and reviewed under the guidance of the HLG, consistent with its own defined approach. The SAP notes that this approach differs from that initially recommended by the SAP, in which co-chairs and authors are solely responsible for the SPM, as in other comparable scientific assessments.

Conclusion: Overall, based on our involvement and observations throughout the design and development of GEO-6 as well as our final review, the SAP concludes that despite the several challenges and constraints noted above, the GEO-6 process was implemented in a scientifically credible way. In order to maintain the credibility of future GEO processes and to continue to leverage the capacities that have been harnessed to date, it is critical for UN Environment to provide predictable and stable resources for the entirety of future major global assessments.

Signed on behalf of the GEO-6 SAP

GEO-6 SAP Co-Chairs Prof Nicholas King & Prof Sarah Green

Annex 2 – Participants List

	TITLE	FIRST NAME	FAMILY NAME	EMAIL	COUNTRY	REGION
1	Prof.	Paul W.	Ekins	p.ekins@ucl.ac.uk	United Kingdom	Europe
2	Prof.	Joyeeta	Gupta	j.gupta@uva.nl	The Netherlands	Europe
3	Prof.	Nicholas D.	King	nking@gecko-net.com	South Africa	Africa
4	Prof.	Sarah	Green	sgreen@mtu.edu	USA	North America
5	Dr.	Maria del Mar Viana	Rodriguez	mar.viana@idaea.csic.es	Spain	Europe
6	Prof.	N.H.	Ravindranath	ravi@ces.iisc.ernet.in, nh.ravi@gmail.com, nhravi@iisc.ac.in	India	Asia and the Pacific
7	Prof.	Asma	Abahussain	asma@agu.edu.bh	Bahrain	West Asia
8	Prof.	Paulo Eduardo	Artaxo Netto	artaxo@if.usp.br	Brazil	Latin America and the Caribbean
9	Dr.	DanLing	Tang	lingzistdl@126.com	China	Asia and the Pacific
10	Prof.	Ahmed	Khater	drkhater@yahoo.com, drkhater@nwrc-egypt.org	Egypt	Africa
11	Dr.	Paolo	Laj	paolo.laj@ujf-grenoble.fr	France	Europe
12	Prof.	Anand	Patwardhan	apat@umd.edu	USA	North America
13	Prof.	Naohiro	Yoshida	yoshida.n.aa@m.titech.ac.jp	Japan	Asia and the Pacific
14	Prof.	Odeh	Al-Jayyousi	odjayousi@gmail.com	Jordan	West Asia
15	Prof.	Byung-Kook	Lee	bkleee@kei.re.kr, bkleeekei@gmail.com, songjy@kei.re.kr	Republic of Korea	Asia and the Pacific
16	Dr.	Franklyn	Lisk	f.lisk@warwick.ac.uk	United Kingdom	Europe
17	Prof.	Wendelin	Stark	wendelin.stark@chem.ethz.ch	Switzerland	Europe

	TITLE	FIRST NAME	FAMILY NAME	EMAIL	COUNTRY	REGION
18	Dr.	Toral	Patel-Weynand	tpatelweynand@fs.fed.us	USA	North America
19	Prof.	Majid	Shafiepour Motlagh	Shafiepour@ut.ac.ir, Shafiepourm@yahoo.com	Iran	Asia and the Pacific
20	Mr.	Clever	Mafuta	clever.mafuta@grida.no	Norway	Europe
21	Ms.	Mayar	Sabet	msabet@cedare.int	Egypt	Africa
22	Dr.	Ahmed	Abdelrehim	ahrehim@cedare.int	Egypt	Africa
23	Dr.	Jacques André	Ndione	jacandrendione@yahoo.fr	Senegal	Africa
24	Dr.	Simone Marie	Maynard	maynardsimone@gmail.com	Australia	Asia and the Pacific
25	Dr.	Manal	Elewah	melewah@gmail.com	Abu Dhabi	West Asia
26	Eng.	Joy	Jadam	joy.jadam@gmail.com	Lebanon	West Asia
27	Dr.	Asha	Singh	asingh@oecs.org, a.singh@envgovconsulting.com ashasing@yahoo.ca,	Guyana	Latin America and the Caribbean
28	Dr.	Ariana	Rossen	arianarossen@gmail.com, arossen@ina.gob.ar, arianarossen@yahoo.com.ar,	Argentina	Latin America and the Caribbean
29	Mr.	Muhammad	Ijaz	muhammad.ijazmalik@gmail.com	Pakistan	Asia and the Pacific
30	Prof.	Louis	Cassar	louis.f.cassar@um.edu.mt	Malta	Europe
31	Dr.	Chandani	Appadoo	chandani@uom.ac.mu	Mauritius	Africa
32	Prof.	Amr	El-Sammak	elsammakamr@yahoo.com	Egypt	Africa
33	Dr.	Emmanuel Kam	Yogo	kam_yogo@yahoo.fr	Cameroon	Africa
34	Prof.	Paul C.	Sutton	paul.sutton@du.edu	USA	North America
35	Prof.	Yoon	Lee	lyoon21@sunmoon.ac.kr	South Korea	Asia and the Pacific

	TITLE	FIRST NAME	FAMILY NAME	EMAIL	COUNTRY	REGION
36	Dr.	William W.	Dougherty	billd@ccr-group.org	USA	North America
37	Dr.	Washington	O. Ochola	babatamara@yahoo.com	Kenya	Africa
38	Dr.	Emma	Archer	earcher@csir.co.za	South Africa	Africa
39	Dr.	Michael	Brody	michaelsbrody@gmail.com, mbrody@american.edu	United States of America	North America
40	Ms.	Asha	Sitati	sitatiasha@gmail.com, sitaasha@yahoo.com	Kenya	Africa
41	Dr.	Linn	Persson	linn.persson@sei-international.org	Sweden	Europe
42	Prof	Binaya Raj	Shivakoti	Shivakoti@iges.or.jp	Nepal	Asia and the Pacific
43	Prof.	Renat	Perelet	rperelet@hotmail.com	Switzerland	Europe
44	Ms.	Joan	Momanyi	joan.momanyi@gmail.com	Kenya	Africa
45	Prof.	Samy	Mohamed Zalat	samysinai@yahoo.com	Egypt	Africa
46	Ms.	Khulood Abdul Razzaq	Tubaishatt	khulood.tubaishat@arabenv.com	Jordan	West Asia
47	Mr.	Pierre	Boileau	pierre.boileau@un.org	Kenya	Africa
48	Mr.	Edoardo	Zandri	edoardo.zandri@un.org	Kenya	Africa
49	Mr.	Matthew	Billot	matthew.billot@un.org	Switzerland	Europe
50	Mr.	Franklin	Odhiambo	franklin.odhiambo@un.org	Kenya	Africa
51	Ms.	Caroline	Mureithi	caroline.mureithi@un.org	Kenya	Africa
52	Mr.	Sharif	Shawky	sharif.shawky@un.org	Kenya	Africa
53	Ms.	Yunting	Duan	yunting.duan@un.org	Kenya	Africa
54	Dr	Mona	Kamal	yamonakamal@gmail.com	Egypt	Africa
55	Dr	Manal	Tantawy		Egypt	Africa
56	Mr.	Mahmoud	Elbasiony	mahmoudelbasiony@gmail.com	Egypt	Africa
57	Mr.	Mohamed	Meatemed	Mohamed.moatamed@gmail.com	Egypt	Africa
58	Ms	Doaa	Alhalwagy		Egypt	Africa
59	Dr	HEBA	MOSTAFA	heba@emisk.org	Kuwait	West Asia
61	Ms	Mai	Youssef	myoussef@cedare.int	Egypt	IGO

	TITLE	FIRST NAME	FAMILY NAME	EMAIL	COUNTRY	REGION
63	Dr	Aymen	Solyman	aymensolyman@yahoo.com	Egypt	IGO
60	Dr	Mona	Daoud	mdaoud@cedare.int	Egypt	IGO
62	Ms	Catherine	Ghaly	cghaly@cedare.int	Egypt	IGO
65	Mr	Youssef	Emad Yunus	yemad@cedare.int	Egypt	IGO
64	Mr	Mohab	Mahdy	mmahdy@cedare.int	Egypt	IGO
66	Mr	Samir	Sayed	support@cedare.int	Egypt	IGO
67	Ms	Viola	Sawiris		Egypt	IGO