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Subject: Joint Dialogue on Biodiversity June 2024 - Takeaways

On June 10-11, 2024, CEOS, UNCBD, GEO Secretariat and GEO BON gathered in Montreal to open the dialogue on collaboration between our organisations, other involved organisations in biodiversity as well as collaborations between different members of our respective organisations. The overall aim of the dialogue was to understand our respective goals, priorities and plans in responding to the biodiversity loss crisis. The focus of the collaboration was on how Satellite Earth Observations could contribute or how to proceed to determine how and where to invest efforts in order for EO to benefit the Biodiversity Community in implementing the Global Biodiversity Framework.

The following paragraphs presents the main takeaways from the Joint Biodiversity Dialogue from a CEOS perspective. The document tries to capture the essence of the exchanges and the subsequent email comments. To be complete, we would need the main participating organisation to share their perspective on conclusions they drew from the Dialogue.

Therefore, the current document serves to inform CEOS members about the outcomes of the Joint Dialogue as well as to share CEOS' perspective with other organisations for their review and contributions. Takeaways are not attributed to individuals but represent concepts, ideas and positions expressed. Takeaways are numbered for no other reason than to ease reference to specific items in support of discussions.

CONTEXT

The workshop idea grew from an original meeting between CSA (as CEOS Chair Team), UNCBD and GEO BON where the need to share our respective organization's workplans, to increase awareness of each other's initiatives with respect to addressing the Global Biodiversity Framework (GBF) and the Biodiversity crisis as a whole. The workshop evolved into a multi-party discussion on how to collaborate and an effort to define better some next steps or tasks that CEOS could pursue in parallel and in coordination with the other organizations.

GENERAL CONCLUSION

The main takeaway is that all organizations participating in the workshop can rally around one common theme: we all want to help countries (users) that will want and need to report on the progress against biodiversity loss.

This translates in several organization specific perspectives on the tools and information required that are largely dependent on the user capacity and the ease with which data can be integrated in the reporting process. UNCBD talks about stock take and measurements, GEO speaks of the Global Biodiversity System Atlas and CEOS seeks to provide the needed data with a better definition of the user needs. We are all determine to collaborate in responding to this global challenge.

Andrew Gonzales shared a couple of slides that were received with great enthusiasm as they illustrate the flow from monitoring to actions, indicators and reporting responsibilities.



CEOS_GEOBON.pptx

TAKEAWAYS

- 1- Biodiversity Plan for Life on Earth (Monitoring Framework) February 2026 will mark the first reporting but with the option to declare that they (countries) do not have the data and why (most likely reason will be around capacity). **There is definitely not enough time for CEOS to have an impact, certainly not with new observations.**
- 2- There seems to be general agreement that **precise mapping is required to support national and regional monitoring.**
- 3- If a regional approach is of interest, CEOS should engage with UNCBD's "Technology Science & Cooperation" (TSC) centers. A list of these new centers located around the globe is publicly available
- 4- All national reporting requirements should be aligned around the GBF (need for a global coordination mechanism)
- 5- There was even mention that **genetic diversity may be able to be observed through proxy...** this may be a technical/science task in the future.
- 6- It is key that we consider how countries are using the data for reporting but most importantly, how they can use the information to advance their priorities.

- 7- CEOS to support countries navigating the GBF:
 - a. UNCBD is truly looking for CEOS to support Parties with guidance (for countries looking to understand how to invest in their monitoring systems + how and why to use commercial data) Ex: Ramsar Convention toolkit for wetlands inventories
 - b. Data not solely stitched together to develop services & products
 - c. User needs must be clearly identified (not easy, there are gaps)
- 8- CEOS member organizations are already pursuing activities that could have impact on implementing the GBF
- 9- *General Audience and Ultimate Beneficiaries* of the work of a CEOS Biodiversity WG (or whatever CEOS entity it turns out to be) as the biodiversity conservation community writ large.
- 10- Parties of the CBD as the *Specific Audience and Direct Beneficiaries* of the work of a CEOS BioD WG.
- 11- CBD as the primary *Commissioning Entity* for the work of a CEOS BioD WG.
- 12- Similarly, CBD as the primary *Commissioning Entity* for the work of the GEO Ecosystems Atlas. Additionally, the UN SEEA/UNSD is another *Commissioning Entity* for the Work of the GEO Ecosystems Atlas
- 13- Similarly, CBD as a *Commissioning Entity* for related work undertaken by GEO BON through GBIOS.
- 14- We are all Contributors, trying to advance both the state of knowledge on biodiversity and the practice of biodiversity conservation, and supporting the CBD parties with their monitoring efforts and reporting processes.
- 15- The biggest three stakeholders in this landscape as CBD, GEO (both GEO Ecosystems Atlas and GEO BON), and CEOS. Then there are the many powerful entities and science community academics (e.g. ESA, JAXA, FAO, WCMC, NOAA/NASA/USGS, etc.) who are already doing great work in support of the Convention(s).
- 16- The workshop sessions encouraged discussion and whiteboard jams - session deliverables will need to be unpack/analyzed

17- A preliminary list of “missing pieces” that we collectively need to work on. This represents a perception with the limited time we had to clarify further:

- a. Best practices on how to integrate EO data.
- b. Structuring the repository of information and data to facilitate biodiversity user community.
- c. Availability of data/products for people to test/comment.
- d. Coordination mechanism between our international organizations An enhanced coordination between group members should mean to have regular meetings (1-2 per year), in order to ensure progress monitoring and coordination
- e. Establishing goals and distributing responsibilities
- f. Establishing links with the biodiversity network experts
- g. Framing a collective commitment
- h. Developing services that are easy to understand.
- i. Agreed ecosystem classification.
- j. Method for integrating different pieces in the Global Biodiversity Atlas

18- Thought on objectives for a CEOS led team included:

- a. An understanding of currently available data/products would be beneficial
- b. Define specifically what type of satellite data would be needed for **GET** level 3 – provide additional detail on not just extent but condition and change.
- c. Define specifically what type of satellite data would be needed for specific EBVs – provide additional detail on where satellite data does not help with developing a data product but can be used to identify where data collection needed to occur.
- d. On the above, provide guidance on which satellites have the above information, what public data is available and what are the use cases where a country may want to buy satellite data.
- e. Pull together guidance for countries looking to understand how to invest in their monitoring systems – I think a decision try with demos/pilots would be useful. For example, for question X, here is what you might want to do.”
- f. CBD’s (i.e. Parties’/countries’) needs for monitoring GBF ought to be the basis for initiating the CEOS team.
- g. Team also being the interface of CEOS in the development of value-generating initiatives of the Group on Earth Observations, specifically the Global Ecosystems Atlas.
 1. important we take advantage of this momentum and reaffirm the relationship between GEO and CEOS whereby, as everyone likes to say, CEOS is the space arm of GEO (and a Participating Organization of GEO involved in the shaping and implementing of GEO’s Strategy, Implementation Plan, the Work Programme) – thus we are One (one body). This, distinguishes GEO from other international entities such as UNEP-WCMC, or FAO that often get grouped together.

2. As CEOS sees its work as being user-driven, and as GEO initiates development of a user-driven solution-oriented Initiative/Flagship, having CEOS via a team or other mechanism, participate/interface with the Flagship creates the much desired modality of us all **co-designing/co-creating** this user-driven solution, thereby creating the opportunity for a continuous feedback loop on the application of satellite data at least in the area of ecosystem extent (and condition) as defined by the needs of GBF Headline Indicators and Targets.
3. GEO Global Ecosystem Atlas: a mechanism to connect satellite data to this external platform should be developed

19- “challenges” mentioned during the workshop include:

- a. Understanding the needs
- b. Expand the work beyond ecosystem extent towards conditions and changes
- c. Labelling of ecosystems convention
- d. Confusion of biodiversity community on the respective roles of our organisations
- e. Diverse needs of observations: regional, national and global catering to the need of reporting vs protecting
- f. Structuring the guidance: tailor to maturity of users, in the use of commercial data and type of EO data

Reference material used during the workshop is available below:

https://drive.google.com/drive/folders/1k-s_G26DkpXF0ulHek7dg_NSC8zIFE4I?usp=drive_link