

Expert Advisory Group for a Re-evaluation of GEOSS Terms of Reference

This document is submitted by the Secretariat to the Programme Board for discussion.

1 RATIONALE

The *GEO Strategic Plan 2016-2025: Implementing GEOSS* defines GEO's Vision and Mission as:

“GEO, a global partnership of governments and organizations, envisions a future wherein decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations. To realize its Vision, GEO works to connect the demand for sound and timely environmental information with the supply of data and information about the Earth that is collected through observing systems and made available by the GEO community. In doing so, GEO works to unlock the power of Earth observations by facilitating their accessibility and application to global decision-making within and across many different domains.

A central part of GEO's Mission is to build the Global Earth Observation System of Systems (GEOSS). GEOSS is a set of coordinated, independent Earth observation, information and processing systems that interact and provide access to diverse information for a broad range of users in both public and private sectors. GEOSS links these systems to strengthen the monitoring of the state of the Earth. It facilitates the sharing of environmental data and information collected from the large array of observing systems contributed by countries and organizations within GEO. Further, GEOSS ensures that these data are accessible, of identified quality and provenance, and interoperable to support the development of tools and the delivery of information services. Thus, GEOSS increases our understanding of Earth processes and enhances predictive capabilities that underpin sound decision-making.”

Five years after the Strategic Plan was adopted by the GEO Plenary in Mexico City and endorsed in the Mexico City Declaration (2016), a key finding of the 2021 GEO Mid-Term Evaluation Report was that:

“GEO needs to reassess the concept of Global Earth Observation System of Systems (GEOSS), what the main goals are, and whether the original concept of GEOSS remains relevant to the organization without modifications. Specifically, GEO should evaluate and decide what it wants or needs to pursue in terms of data infrastructure, producing data products, and user services,

how GEOSS can integrate and execute the Knowledge Hub, and whether GEO has the capacity to carry this out. GEO is presently pursuing a wide range of functions, which fall into three main areas of GEO’s focus including, serving as a convener, facilitator of access to open data, and user services. GEO should establish its focus going forward in terms of which of these roles should be prioritized given that it has limited resources and capacity. There is a balance needed between support for the upstream and downstream of the Earth observation value chain. Clearly defining where GEO can have the most profound impact will help ensure a lack of mission or scope creep, coordination with UN and other bodies, and clarity on what GEO can deliver to its users and stakeholders.”

The Report goes on to make the following recommendation:

“Given that the evaluation has highlighted that the concept of GEOSS and its implementation has come to assume different meanings across the organization, GEO should consider assessing the concept of GEOSS in light of the recent evolution of GEO. To do so, GEO should consider establishing an Expert Advisory Group composed of external experts, with expertise in Earth observation science, user engagement, as well as socioeconomic and policy domains, and internal members, to explore to what extent the concept of GEOSS is still relevant to the organization as it no longer appears to define the core of GEO’s activities as originally defined.”

In response, the GEO Executive Committee at its 56th meeting took the decision to establish an Expert Advisory Group as recommended and tasked the Secretariat to propose a detailed process for the GEOSS re-assessment, including a list of experts to be invited to participate on the Expert Advisory Group.

2 PURPOSE

The GEO Executive Committee, on behalf of the GEO Plenary, has established an Expert Advisory Group (EAG), to review:

1. Whether the concept of GEOSS continues to be relevant to the GEO Mission and, if so, how this concept should be defined in the context of GEO’s current understanding of its value proposition; and
2. Whether GEO should continue to serve as a provider of geospatial information and services infrastructure and, if so, what main function the said infrastructure should provide and what form it should take.

The EAG comprises a broad range of stakeholders, including representatives of scientific, technical, socioeconomic and policy communities, strategic think tanks, development agencies, civil society and citizen science communities, reflecting the diversity of interests within the (G)EO community. The EAG provides complementary input to the ongoing re-evaluation process as discussed by the GEOSS Infrastructure Development Task Team. The EAG is supported by an EAG Coordinator at GEO Secretariat.

The EAG reports to the Executive Committee.

3 DELIVERABLES

The EAG will deliver to the Executive Committee the following documents for their review and action:

1. An assessment, with recommendations, of the overall relevance of the concept of the Global Earth Observation System of Systems (GEOSS) in the context of the present day and future GEO. Should the concept of GEOSS be retained, the document will provide an articulate definition and compelling value proposition to properly position GEOSS in relation to other core activities of GEO. This document will be presented for approval by Plenary during GEO Week 2022.
2. An assessment, with recommendations, of whether GEO should provide infrastructure support in service to its mission. If so, a description of the Infrastructure Foundational Task (FT) with a definition of the function and form of the service to be provided as well as the necessary set of actors, resources, timelines, governance and coordination mechanism to execute the task. This document will need to form part of the 2023-2025 GWP, which will be presented for approval by Plenary during GEO Week 2022.
3. Set of recommendations (with rationale) for any item within EAG mandate but beyond the scope of the Infrastructure FT outlined in 2) that may need to be addressed by other components of GEO.

Interim drafts of these documents will be circulated to the GEO Executive Committee and GEO community for review and comment.

4 MEETING PROTOCOLS

1. To prepare the versions of the documents to be presented to the GEO Executive Committee and subsequently the Plenary, the EAG will work on an intensive schedule and is expected to meet three times, or more if necessary. The EAG members are expected to take part in these meetings and actively contribute to the production of the deliverables. Participation in the initial meeting will be virtual; the remaining meetings may be a hybrid of on-site (Geneva) and virtual participation.
2. The EAG may wish to elect two co-leads, to be decided electronically via nomination (self or otherwise) and ballot prior to the first meeting, to facilitate collaboration with the EAG Coordinator.
3. As is the custom in GEO, the EAG takes decisions by consensus. In cases where consensus may not be attainable, the EAG can take decision by majority opinion.
4. The EAG Coordinator will support and coordinate the work of the EAG and prepare the first meeting of the EAG by providing an initial body of literature that will include key documents on GEO, GEOSS and GEOSS Infrastructure, as well as external literature with relevance to the scope of work.

5 TIMELINE

The nominal timeline for EAG meetings and deliverables is shown in the Table below. With the exception of the final GEOSS Concept document deliverable for the Executive Committee and Plenary during GEO Week 2022, this timeline may be revised at any point by the EAG, as necessary.

Task	Expected Completion Date
Initial meeting of the Expert Advisory Group (EAG).	Early March 2022
Verbal update presentation.	57 th ExCom – 15-16 March 2022
First draft of analysis of the GEOSS Concept circulated to GEO community for comment.	End of March 2022
Second meeting of EAG	Early April 2022
Second draft of GEOSS Concept document circulated to GEO community for comment. Initial draft of Infrastructure Foundational Task and other recommendations circulated to GEO community for comment.	Mid-April 2022 (coordinated with GEO Symposium)
GEOSS Concept document revised and presented for discussion.	58 th ExCom July 2022
Third meeting of EAG.	Late-August 2022 (coordinated with PB meeting)
Third draft of GEOSS Concept document circulated to GEO community for comment. Second draft of Infrastructure Foundational Task and other recommendations circulated to GEO community for comment.	Mid-September 2022
All documents revised and presented for discussion.	59 th ExCom November 2022
GEOSS Concept proposal presented to GEO Plenary for approval. 2023-2025 GEO Work Programme, including Foundational Task on GEOSS Infrastructure implementation, and other recommendations presented to GEO Plenary for approval.	November 2022