

Executive Committee Response to the 2021 GEO Mid-Term Evaluation Report

This document is submitted by the Executive Committee to the 17th Plenary for decision.

1 INTRODUCTION

Annex A of this document presents a proposed response from the Executive Committee to the final report of the 2021 GEO Mid-Term Evaluation (MTE). The structure of the response is based on the findings and recommendations in the MTE report and the original text of those findings and recommendations are provided in Annex A for context. The right-most column of the table in Annex A, labelled “Management Response” represents the proposed response from the Executive Committee and is the part that is presented for review and approval.

An initial draft of the response was prepared by the Secretariat based on its analysis, taking account of planned actions by the Secretariat and other GEO bodies, including the Programme Board and its subgroups. This analysis included review not only of the findings and recommendations, but also the full text and evidence presented in the full MTE report. The initial draft was then reviewed and revised by the Evaluation Response Advisory Group (ERAG), which was established by the Executive Committee at its 55th meeting for the purpose of overseeing the drafting of the response.

Once approved by the Executive Committee, the response will be presented to the GEO-17 Plenary for its approval following presentation of the findings and recommendations of the MTE by the MTE team.

2 BACKGROUND

During the period 2009 to 2015, six evaluations were conducted within GEO, four targeted evaluations and two comprehensive evaluations. These evaluations were conducted by teams comprised of individuals nominated by GEO Members and Participating Organizations and which were overseen by the GEO Monitoring and Evaluation Working Group (M&E-WG). Responses to each of these evaluations were prepared by the Executive Committee and presented for approval by the GEO Plenary. The M&E-WG tracked implementation of the actions agreed by the Executive Committee in response to the evaluations and reported their findings to the GEO Plenary.

Following adoption of the 2016-2025 GEO Strategic Plan¹, the general approach of using evaluation teams nominated by GEO Members was retained, though the M&E-WG was disbanded and the tasks of organizing the evaluations was given to the Secretariat as part of the Foundational Tasks. While the process of responding to evaluations was not specifically mentioned in the Strategic Plan, it is assumed that this responsibility remains with the Executive Committee in its role as the “client” for the

¹ See GEO Strategic Plan 2016-2025: Implementing GEOSS – Reference Document, p.11.

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evaluation. However, a potential gap remains regarding the tracking of implementation of the responses to the evaluation.

3 RECOMMENDATIONS

The ~~ERAG-Executive Committee~~ recommends that:

1. The ~~Executive Committee~~GEO Plenary approve the ~~Management-Executive Committee~~ Response to the MTE, as presented in Annex A; and
2. Assign the monitoring of implementation of the ~~Management-Executive Committee~~ Response to the Lead Co-Chair, with the support of the Secretariat, ~~to be included in the annual Lead Co-Chair priorities.~~

ANNEX A

Executive Committee Responses to the Mid-Term Evaluation Findings and Recommendations

Key Finding	Recommendation	Management Response
<p>1 Mission: GEO is making good progress on working towards becoming a world leading organization in coordinating availability, access and use of Earth observations. It is successfully contributing to unlocking the potential of Earth observations by connecting the demand for sound and timely environmental information with the supply of data and information about the Earth, facilitating their accessibility and application to global decision-making within and across many different domains. It has an opportunity to become increasingly recognized as a global convener of different communities including member states, international organizations, data and service providers, users and the private sector in the field of Earth observations given the increasing availability of data, increasing attention towards sustainability topics and the need for information that can support decision-making in this field. It can fulfil the above-mentioned role by leveraging its ability to connect such communities, particularly with a view to covering the downstream of the value chain,</p>	<p>GEO should improve the definition, targeting, communication of and emphasis on its value-added proposition and benefits derived for external organizations to participate in GEO. Possible ways to do this include stressing GEO’s messaging around its value added, its convening role, inclusivity and capacity development to foster greater engagement of all its existing and potential members, Participating Organizations and Associates.</p>	<p>The Executive Committee concurs.</p> <p>The global Earth observations community has changed significantly in the last five years, and GEO has adapted to keep up with the change. The accelerating pace of environmental change calls for accelerated action to increase the utilization of Earth observations in decision-making. This involves making solution-ready tools and services available for application at regional and national levels, especially in the least developed countries and underserved communities.</p> <p>Achieving this requires fast-paced strategic partnering with actors across the information value chain – data and technology providers, researchers, developers, knowledge brokers, funders, and decision-makers. Increasingly, these actors represent the non-governmental sectors – private industry, philanthropies, civil society, and indigenous communities. To act at the pace of change means forming partnerships</p>

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<p>providing a platform for collaboration and representing a source of branding, recognition and trust. As regards the GEO-WMO relationship, respondents noted the need to better define and strengthen this relation, highlighting possible areas of complementarity.</p> <p>2 Value proposition: A clear gap that is evident across GEO is the need to better define its value proposition. A clearly defined value proposition is missing from messaging to members, but also to external partners, including UN institutions, and partners, such as the private sector. GEO’s voluntary nature can be an asset, but this needs to be tempered with a clear advantages organizational vision that is communicated within the GEO community and to potential partners and funders. A part of this clarity will require greater interaction with individual members to better understand their needs and where GEO can contribute and what GEO can offer, for instance in convening, addressing capacity gaps, providing access to open Earth observation data or in the standing up of National GEOs. GEO’s struggle to attract new donations to its Trust Fund can be partly tied to the lack of understanding among key</p>		<p>where each party brings a clear vision and commitment to the collective action.</p> <p>GEO remains a single global intergovernmental organization focused on transdisciplinary application of EO that now has a proven record of forging strategic partnerships with the aforementioned actors – driving development of open tools, services and knowledge, extending access to latest technologies for capacity development worldwide and securing policy and financial support to achieve end results. GEO continues to attract more new Members, Participating Organizations and Associates who want to be part of GEO to drive action around climate change, disaster risk reduction and long-term sustainable development. This has continued GEO’s evolution into a more diverse and inclusive community than five years earlier.</p> <p>To keep up with the evolution and growth of its community, GEO has modernized the communication channels and methods, with tens of thousands of Earth observation practitioners, scientists, policy developers and decision makers engaging with GEO on social media. Still more can be done to communicate the breadth of activities going on in GEO and how these relate to the GEO vision and mission.</p>

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<p>stakeholders of the value of GEO coupled with a lack of communication/marketing of the value of GEO to the global community, as well as at the regional and national level. To define its value added, GEO should agree on specific areas of focus where it can deliver, in light of developing technologies relative to its founding goals and its convening function. There is a sense in the GEO community that the next phase of GEO should be more action-oriented on what GEO can deliver and where it can make unique contributions to establish itself as a global leader in Earth observation.</p>	<p>GEO-WMO relationship</p> <p>While no change is suggested to GEO's legal status and its Standing Agreement with the WMO, this specific relation, which is also administrative in nature, should be reviewed to identify possible areas of cooperation in light of recent improvements, taking into consideration the suggestions provided in the report.</p>	<p><i>The Executive Committee requests the Secretariat to develop and execute an iterative strategy for communicating tailored messages on GEO's value proposition to different stakeholders and audiences and share these broadly for others to see and [re]use to assist with consistency. The Executive Committee will oversee the development and execution of the strategy.</i></p> <p>GEO-WMO relationship: The Executive Committee notes the positive steps that have been taken by the Secretariat in recent years to improve the programmatic relationship with WMO. Existing areas of collaboration include the Global Framework for Climate Services, the Global Climate Observing System, WMO Data Conference, and most recently final preparations for the launch of Sustained Observations Financing Facility in support of the Global Basic Observation Network. It also notes the continued strong administrative relationship on finance and audit, human resources, facilities, and informatics.</p> <p>The Executive Committee welcomes the recent agreement between the GEO Secretariat and the WMO leadership to hold regular meetings to coordinate collaboration on areas</p>

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		<p>of mutual interest. The Executive Committee also recognizes the initiative taken by the European Commission to encourage strategic collaboration among GEO, WMO, and the IPCC and encourages other Members to consider similar action.</p> <p><i>The Executive Committee will engage with the GEO Secretariat regularly during its meetings to consider additional opportunities and means to strengthen systematic GEO-WMO collaboration.</i></p> <p><i>The Executive Committee also encourages all GEO Members to facilitate coordination between their delegations to GEO and to WMO to promote sharing of information and complementarity of positions.</i></p>
<p>3 Communication and Engagement: From the surveys and interviews, it was shown that there are inconsistent methods of internal communication and coordination to share information across the GEO Work Programme and to engage both current and potential members and users. This has limited GEO's ability to advance as an organization. There is also a widespread perception that because of this lack of communication and engagement, many members are not involved or</p>	<p>From an operational point of view, GEO should improve internal and external communication, as well as synergies among the different elements of the Work Programme, GEO governance bodies and the Secretariat, and to all of GEO relevant stakeholders, ensuring that frequency and content of communication is consistent across the organization and includes targeted communication on key items and decisions regarding the entire organization.</p>	<p>The Executive Committee acknowledges the findings of the evaluation and notes three specific areas of concern were identified in the report (p.41):</p> <ul style="list-style-type: none"> • GEO governance structure, particularly the terms and approval of the Co-Chairs; • GEO rules concerning the commercial sector; • Points of contact and direct communication with the GEO community,

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<p>contributing as meaningfully as they could to the work and funding of the organization.</p>		<p>including the GWP activities, POs, Associates, and other partners.</p> <p><i>The Executive Committee will oversee the GEO Secretariat’s review and any necessary revision of the relevant parts of the GEO website and other communications materials.</i></p> <p><i>The Executive Committee, with the Secretariat, will review the GEO Rules of Procedure with the aim of simplifying and clearly communicating the GEO governance process, especially with respect to GEO Co-Chairs, Caucuses, and commercial sector participation. Administrative changes that do not fundamentally affect structures, if necessary, should be completed for approval by the GEO-18 Plenary. Broader structural reforms, if necessary, will be considered in the context of development of the post-2025 GEO (GEO 3.0).</i></p>
<p>4 Re-evaluating GEOSS: GEO needs to reassess the concept of 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</p>	<p>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</p>	<p>The Executive Committee recognizes that the GEOSS concept has been a central part of GEO’s mission. The Executive Committee agrees with the need to reassess the concept of GEOSS and its implementation, especially in the context of preparing the foundation for post</p>

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<p>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.</p>	<p>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.</p>	<p>2025 GEO (aka GEO 3.0). The focus of the GEOSS concept reassessment should be to review: 1) how the concept of GEOSS can evolve to remain relevant to the GEO Mission and be adapted to GEO’s understanding of a refined value proposition; and 2) what role GEO should take to serve as a provider of infrastructure for EO resources.</p> <p>The process will need to include an analysis of the current global landscape of major efforts related to big data, Earth information delivery, knowledge infrastructure, especially multilateral and international efforts. Given that much of the infrastructure that underpins GEO’s efforts is, and will likely continue to be, provided by the commercial sector, it is important to ensure that public investments are optimized and leveraged and are not duplicative.</p> <p>The Executive Committee concurs with the recommendation to establish an Expert Advisory Group (EAG) to review the broad concept of GEOSS which would include, but not limited to, the GEOSS infrastructure. With respect to the GEOSS infrastructure, the EAG will provide complementary input to the ongoing re-evaluation process as discussed by the GEOSS Infrastructure Development Task</p>

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		<p>Team. The EAG will be constituted of experts from GEO initiatives, and a broad range of external stakeholders, including experts in EO sciences and applications, technical and policy end-users, representatives of public and private sector and civil society.</p> <p><i>The Executive Committee will oversee the design by GEO Secretariat of a detailed process for the GEOSS re-assessment, including a list of experts to be invited to participate on the Expert Advisory Group. The process should reflect diversity of gender, generation, and geography, as well as the diversity of interests within the GEO community. The Executive Committee will kick off the EAG process in early 2022 and the recommendations from the EAG process are expected to be available to support decisions at the GEO-18 Plenary.</i></p>
<p>5 Relations with the UN and other stakeholders: In the past five years, GEO’s engagement with the UN and multilateral environmental agreements has improved consistently. This was largely due to the establishment of the Engagement Priorities that allowed for a better alignment of agendas in the context of the SDGs, the Paris Agreement</p>	<p>GEO has made good progress on developing its relationship with UN institutions over the past five years and should work on strengthening this relationship further at a global, regional, national, and local level. GEO should also work on improving its engagement with International Financial Institutions, statistical agencies and the private sector increasing</p>	<p>The Executive Committee agrees that there has been good progress over the past five years in engaging United Nations agencies and convention secretariats and believes that this progress is largely due to the GEO Engagement Strategy and the use of the engagement priorities as “targeted focal themes”. The Executive Committee notes that the Climate</p>

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<p>and the Sendai Framework for Disaster Risk Reduction. However, there are opportunities to further improve relations with UN agencies both at a high policy level and at an operational level by deepening their collaboration with Regional, National GEOs and GEO Work Programme activities. GEO has made limited progress and it needs to work further to improve its relations with multilateral development banks and statistical agencies. There has been progress in this area over the past five years through Initiatives such as EO4EA and EO4SDGs making advancements, however GEO needs to continue to strengthen and expand these relationships across the organization. Strengthening such engagement would contribute to the establishment of a comprehensive ecosystem approach to the role of GEO in coordinating availability, access and use of Earth observations. Lastly, even though there has been progress in the engagement with the private sector and member states, better results can be achieved through a clearer definition of GEO value proposition.</p>	<p>awareness of its role in the Earth observations field. To this end, GEO would benefit from a clearer value proposition and targeted focal themes that can help to improve linkages and coordination within the GEO Work Programme, as well as with external stakeholders. It is recommended that GEO’s Executive Committee should revisit the ‘flagship-centred strategy’ it once proposed as a way to establish clearer overarching priorities that can help to create synergies in the Work Programme and align them with key focal themes that are relevant to GEO’s users and stakeholders.</p>	<p>Change and Disaster Risk Reduction Working Groups, which are key components of the implementation of the engagement priorities, were in an early stage of development at the time of the evaluation. These Working Groups are expected to play a significant role in the strengthening connections across GWP activities. The Executive Committee recognizes the leadership role of the Secretariat in implementing the Engagement Strategy and the difference that has been made by the addition of engagement priority coordinators in the Secretariat (either through the Trust Fund or by secondments).</p> <p>The Executive Committee acknowledges that less progress has been achieved thus far in engaging multilateral development banks and statistical agencies, though it applauds the considerable achievements in this regard by EO4SDG and EO4EA. The Executive Committee supports the Secretariat’s proposal to rebalance its efforts to increase attention to engagement with GEO Members and POs. Part of this engagement effort will be to expand connections to a wider range of ministries and agencies with GEO Members, targeting statistical agencies and others that are</p>

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		<p>most relevant to addressing the engagement priorities.</p> <p>The Executive Committee notes that relationship and trust-building among institutions require systematic and consistent engagement that demands commitment of dedicated resources and encourages GEO Members to contribute additional resources and/or secondments to support these efforts.</p>
<p>6 Users’ needs: Despite the different approaches adopted to this topic, GEO has not developed a systematic mechanism to report on users’ needs and requirements, ensuring that these are identified and addressed, especially when different needs emerge at a regional, national and local level. This situation might vary at different levels of implementation of the GEO Work Programme, where specific activities, in particular Flagships such as GEOGLAM and GOS4M, or some Initiatives such as GEO LDN, GEOGLoWS and EO4SDGs, may have a better understanding of their users’ base. Regional GEOs together with the GEO Work Programme activities: Flagships, Initiatives and Community Activities have been indicated as bodies within the GEO global structure that could play a central role in</p>	<p>Reporting on and connecting with users’ needs and their translation into requirements for products and services should be embedded in a more cohesive manner across the GEO Work Programme. GEO should consider a more structured way of collecting and consolidating requirements for their user community in a standardised format across the GEO Work Programme activities. GEO Work Programme activities should be expected to be able characterise and document these needs and requirements in a standardised format for their user community, by the time they reach the stage of a GEO Initiative. A greater role should be taken by Regional GEOs in collecting tailored requirements for their regions. The Programme Board should ensure that these needs and requirements are better integrated</p>	<p>The Executive Committee agrees that consideration of user needs is central to GEO’s work. We note that the term “users” is not homogenous and lends itself to additional breakdown to distinguish among scientific users, developers, operational users, policy and public end-users. This understanding is key in defining efforts to address the broad statement about understanding and reporting on ‘user needs’.</p> <p>We note that the Programme Board reinforced the importance of user needs through the emphasis in the 2020-2022 GWP on co-design and co-production with users in all GWP activities and the revised criteria for acceptance of GEO Flagships, Initiatives, and Community Activities that gave greater attention to identifying needs – from observations to end-</p>

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<p>reporting on users’ needs and ensuring that GEO maintains contact with its users’ base.</p>	<p>across GEO’s system to guarantee the broad thematic scope of GEO engenders its full potential and to increase their capacity to link national and regional realities with the global GEO. GEO should also clarify how and if GEO activities should progress from a Community Activity to an Initiative to a Flagship. GEO should have greater clarity on the requirements to progress from one stage to the next and also on how many Flagships GEO should have, and when activities should remain at their existing level or when the latter should progress. In summary, there is limited guidance on the lifecycle of activities within the GEO Work Programme.</p>	<p>user applications. The Executive Committee believes that the GWP activities remain the most appropriate forums in which users and providers may discuss needs and potential solutions.</p> <p>The gap identified by the MTE team is that, to a large extent, each GWP activity pursues this interaction with users independently. There is at present no common framework for analyzing which types of users and decision challenges are being addressed across the GWP, as well as which observational data sets are being used. The Executive Committee agrees that such a framework would be useful and requests that the Programme Board and the Secretariat look to address this gap in the development of the 2023-2025 GWP. The Executive Committee also welcomes further efforts by the Regional GEOs to explore and communicate regional perspectives in this context, subject to the interest and ability of each Regional GEO to support such efforts, noting these may complement the core interface to users provided by the GEO Work Programme.</p> <p>Regarding the requirements for “progressing” from a Community Activity to an Initiative to a Flagship, the Executive Committee notes that these categories were not originally</p>

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		<p>intended to represent levels of progression, although it is acknowledged that this is how they are often perceived. It also recognizes that the criteria for each category were revised for the 2020-2022 GWP and that the Programme Board has an established review process for considering applications to change category.</p> <p><i>The Executive Committee requests that the Programme Board review the criteria and process as part of the development of the 2023-2025 GWP and requests that the revised criteria and procedures be better communicated to the GEO community. The Executive Committee also requests that the Programme Board apply their criteria more strictly for the 2023-2025 GWP.</i></p>
<p>7 Internal processes and connections: The GEO Work Programme, while marked by bottom-up approaches and driven by coalitions of willing communities of practice, needs to be balanced with GEO’s ability to maintain a clear vision and focus. The broad GEO Work programme would benefit from better coordination, improved communication and interoperability between GEO’s implementation mechanisms. The scale of the current Work Programme makes this more</p>	<p>GEO would benefit from establishing clearer high-level focal themes that can serve to drive synergies and improve coordination across the GEO Work Programme. That would be done by having them established at the Executive Committee level and then executed by the Programme Board and GEO Secretariat in coordination with the Work programme activities. It would be beneficial for the GEO Executive Committee to establish a team or teams, which can consider relevant</p>	<p>Clear focus in GWP:</p> <p>The Executive Committee agrees with the spirit of this recommendation that there is a need to further focus the work of GEO, and largely of the GEO Work Programme activities, to deliver concrete actionable results. We also concur with the recommended aspects for guiding this effort – a limited set of co-designed problem-driven (solution-driven) activities that maintain explicit linkages and support the GEO engagement priorities. This process should</p>

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<p>challenging for the Programme Board and the GEO Secretariat to execute. Greater coordination at the thematic and regional level may help to reduce redundancies and improve integration. However, GEO needs to keep in mind that without additional resources (both within the Secretariat and from members) or improved rationalisation of existing activities it will be difficult to further expand the Work Programme while still maintaining its overall effectiveness and cohesion. The Executive Committee and Programme Board need to focus more on overarching thematic areas, and concrete goals for GEO providing more top-down direction, while balancing that with a bottom-up approach. The Societal Benefit Areas structure of the GEO Work Programme should be retained, alongside the Engagement Priorities to allow cross-cutting links. An increasing level of interaction between Regional GEOs should be encouraged. The new Knowledge Hub has a potential role to play in providing information to show how Initiatives, Community Activities, Flagships and Regional GEOs currently connect, placing an emphasis on the value chain of Earth observation to users and where GEO provides this across its different initiatives.</p>	<p>international objectives and priorities of GEO's members that can in turn guide the identification of possible focal themes for GEO for a set number of years. This team, which is also encouraged to consult users and external communities, can advise the GEO Executive Committee on four important areas to improve synergies, knowledge sharing and reduce redundancies:</p> <p>i) improving connections between GEO activities that can link to high-level priority areas for GEO; ii) considering how these high-level focal themes will be benefitted by improved knowledge sharing and sharing of experiences using the new Knowledge Hub alongside other coordination mechanisms; iii) providing recommendations concerning the inclusion of further activities, and highlighting any gaps in the GEO Work Programme and the value chain on the use of Earth observation under the GEO Work Programme in consideration of the proposed focal themes; and iv) improved links between Regional GEOs, which will also need to be reflected in the proposed high-level focal themes approach.</p>	<p>make use of suitable existing GEO/GWP activities as well as potential new contributions from relevant stakeholders, clearly linked and contributing to GEO's engagement priorities, to form viable initiatives that can secure appropriate funding and support from GEO members and partners. Key to this will be developing these work initiatives with specific measurable milestones and planned impact to allow GEO to effectively monitor, evaluate and learn from the implementation. This will enable GEO to provide clear(er) messages on the return on investment (RoI) to the community of funders and sponsors. The Executive Committee views this approach as essential in the formulation of GEO Work Programme 2023-2025 and the strategy for GEO 3.0.</p> <p><i>The Executive Committee looks to the Secretariat to develop a structured approach and appropriate proposals for Programme Board and GEO Executive Committee for ultimately mobilizing action among relevant stakeholder groups.</i></p>

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<p>8 External and technical interoperability: Despite recent attempts to improve it, the GEOSS Implementation Plan needs to be reviewed. The GEOSS portal, as described, is unable to meet user expectations in terms of its low technical capability, low performance compared with other global and regional systems, and the lack of good integration of in situ data. This view is supported by the low rates of use of the portal when compared with other global, regional and national portals. Technology advances have significantly changed the original concept for the GEOSS and GEO no longer has the tools, right partners or resources to meet the project GEO had intended in the early years (2005 – 2010) to build a system of systems. GEO would benefit from improved external connectivity with major Earth observation data portals, at all levels. Attention should be paid to links with global, regional and national data systems. Particular attention should be made to improving the availability and integration of in situ observations within the GEO Portal, working with in situ terrestrial, freshwater, coastal, ocean and atmospheric observation systems and new in situ initiatives such as GBON and others. It is believed that the new</p>	<p>GEO should review the content of the GEOSS Implementation Plan to make sure it i) has good links with key global, regional, and national data portals; ii) addresses gaps in the integration and availability of in situ data; and iii) plans for appropriate use of the Knowledge Hub within the GEOSS overarching structure to demonstrate the value of Earth observation to decision makers. In particular, the work of the In Situ Subgroup of the Data Working Group should be strengthened to focus by GEO theme on in situ data gaps and access. GEO should continue promoting data sharing and management principles for in situ data, including how best to provide access to holdings of scientific networks, citizens' observation programmes, and non-government data providers.</p>	<p>GEOSS Implementation Plan:</p> <p>The Executive Committee takes note of this finding and recommendation, while observing that no comprehensive implementation plan for the GEOSS infrastructure exists for the post-2015 period. Given the close connection between the issues raised here and those in Key Finding 4, the questions related to the concept of GEOSS and GEO's role as a provider of infrastructure will be dealt with as described in the referring Management Response.</p> <p>In-Situ Subgroup of Data Working Group:</p> <p>The In-situ Subgroup of the Data Working Group is developing an active strategy to advance coordination of in-situ observations. As this work progresses, we expect recommendations and actions to be developed that will require engagement by GEO leadership to facilitate action by relevant government entities and various international coordination networks. As part of its work, the In Situ Subgroup, supported by the Secretariat, is planning to collect examples from the GEO Work Programme demonstrating benefits and impact from in situ data sharing.</p> <p><i>The Executive Committee will follow the progress of this activity through</i></p>

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<p>GEO Knowledge Hub could provide more support to the Earth observation value chain and, although still at an early stage of development, should become part of the GEOSS infrastructure. However, this development needs to be balanced against GEO’s other priorities. Recently, the early development of the Knowledge Hub has required a high level of support from GEO Secretariat staff, and this heavy burden is not sustainable in light of other GEO priorities.</p>		<p><i>interactions with Programme Board and Secretariat.</i></p>
<p>9 Role of Regional GEOs: Interviews with key informants highlighted that Regional GEOs need to become more integrated into the functions of the GEO Work Programme and the overarching structure of GEO itself. The current level of coordination and communication within GEO is insufficient to facilitate better interactions at the local/national/regional level with users and stakeholders. Regional GEOs could play a key role in helping to coordinate GEO Work Programme activities at the regional level and facilitating communication within GEO by serving as an intermediary between the development of the GEO Work Programme, the Secretariat, Working Groups and the Programme Board fostering collaboration and identifying potential synergies among all these</p>	<p>Given that the MTE has highlighted the need to better integrate Regional GEOs within the GEO overarching structure and Work Programme, GEO should consider possible solutions to promote an increased engagement, coordination with, and contribution of Regional GEOs across GEO’s governance structure and Implementation Mechanisms. This increased engagement should not add another governance level, but rather utilize existing mechanisms for improved operations between the regional and global level of GEO. Given the unique characteristics of each Regional GEO, it should also ensure a balanced approach that allows flexibility for members and GEO activities to engage directly with GEO at the global level depending on regional</p>	<p>The Executive Committee notes that a key part of GEO’s value proposition is its flexibility and openness. GEO’s structure, with the global GEO Work Programme at its core, enables collaboration between stakeholders with a common interest no matter where they are located, and avoids a hierarchical approach that could artificially constrain opportunities to collaborate.</p> <p>The Executive Committee agrees that there are opportunities for the Regional GEOs to play a greater role in advancing the GEO Mission. However, it also notes that the ability of the Regional GEOs to effectively play these roles varies, and in some cases is constrained by resources to support Regional GEO secretariats.</p>

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<p>bodies. Regional GEOs can also help bolster the implementation of GEO's capacity development strategy by showing where capacity development gaps exist and how GEO's efforts can have the most impact at the institutional level and organizational level. Regional GEOs also have a role to play in promoting exchange on best practices across GEO and upscaling/downscaling successful products, leveraging opportunities for engagement with the commercial sector and exploring funding opportunities at the regional level.</p>	<p>preferences and dynamics. Regional GEOs contributions should be focused in five key areas:</p> <ul style="list-style-type: none"> - Improving overall communication and coordination across the GEO Work Programme and connection with the GEO Secretariat, - Contributing to the realization of GEO's strategy on capacity development given their unique knowledge of users' needs and requirements based on existing capacities, - Promoting opportunities for exchange of best practices and uptake/scaling of successful products that may be developed at a regional or subregional level, - Leveraging opportunities for engagement with SMMEs at the regional level by brokering relations among the SMMEs, the Secretariat and GEO Work Programme activities, - Exploring opportunities for the mobilisation of resources at the regional, national, and local levels. <p>To strengthen the role of Regional GEOs, GEO should consider a role for Regional GEOs that would create synergies with other bodies. Some considerations include having a seconded expert to serve as a point of contact and</p>	<p>There may also be other factors, specific to particular regions, that may reduce engagement of some GEO Members and other stakeholders in the Regional GEOs. The Executive Committee also recognizes recent steps taken by the Regional GEOs to share good practices and to strengthen communication amongst themselves.</p> <p><i>The Executive Committee requests that:</i></p> <ul style="list-style-type: none"> • <i>The Programme Board consider how to strengthen engagement with the Regional GEOs in its work and in the GWP, recognizing its existing efforts through the Regional Engagement Team;</i> • <i>The Capacity Development Working Group renew its efforts to include representatives of the Regional GEOs, possibly as co-chairs;</i> <p>The Executive Committee recognizes that the Concept of Operations document includes provision for Capacity Development Coordinator and Chief Resource Mobilization Officer, which to date has not been filled. The Executive Committee encourages the Secretariat to prioritize the staffing of these</p>
<p>10 Capacity Development: Regional and National GEOs are in close contact with the users of GEO's EO-derived tools and services and as such these bodies, specifically when from developing economies, are also well-placed to identify and report on users' needs and requirements. These bodies would have a deeper understanding of local capacities and the level of expertise of defined categories of users' communities. Recognizing their role in support of capacity development will be important as GEO moves on to implement its capacity development strategy. Given that Regional GEOs have access to users they can tailor and scale solutions based on local</p>		

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<p>conditions and priorities and have connections with other regional and national bodies.</p>	<p>coordination for Regional GEOs at the Secretariat; holding a regular coordinating call between Regional GEOs; organizing an annual event for Regional GEOs to share best practices or establishing a communication tool/platform that Regional GEOs could use to exchange information, organize virtual meetings, and share materials.</p>	<p>positions to accelerate action in capacity development and resource mobilization, including engaging, enabling and supporting regional GEOs contributions to these efforts.</p> <p><i>The Executive Committee also commits to reviewing GEO’s geographically-based structures, including the Caucuses and their linkages to Regional GEOs, as part of the development of proposals for GEO 3.0.</i></p>
<p>11 Engagement with the Private and Commercial Sectors: Engagement with the private sector has increased over the past five years and overall is seen as beneficial and having added to the value of GEO. However, key informants highlighted that lack of the private sectors’ involvement or views in GEO’s activities such as in designing of GEO tasks or Work Programme and rules of engagement with the commercial sector adopted by GEO, among others, is causing the private sector, in particular small commercial sector companies, to not fully participate or see the benefits of participating in GEO’s activities/programmes. In this sense, many noted that GEO should better define its value proposition for the commercial sector and that the GEO Secretariat and Regional GEOs could play a role to help</p>	<p>In view of increasing its engagement with the commercial sector, GEO should try to address the needs of different commercial sector players that might be interested in getting involved, considering possible barriers to engagement and differences related to geography and size. To do so, GEO might consider adopting an action plan for engagement with the commercial sector, developing a targeted approach to address partnerships with companies of different sizes, sectors and geographies. While past engagements brokered by the Secretariat with Amazon, Google and Microsoft, and other engagements that developed at the Work Programme level have represented positive experiences, GEO should improve communication about these efforts across the GEO community. It should also</p>	<p>The Executive Committee welcomes the finding that engagement with the commercial sector is generally viewed by the GEO community as beneficial and that it has increased in recent years. We note the positive response to the various cloud computing credits programmes, coordinated by the Secretariat, that have been enthusiastically taken up by the GEO community.</p> <p>The Executive Committee recognizes the emerging tradition of Industry Track as an integral part of GEO Week events building on the success of the Industry Track events in 2019 and 2020, which provided many opportunities for business-to-government and business-to-business interactions.</p>

Key Finding	Recommendation	Management Response
<p>match and broker possible collaboration between commercial sector partners and Work Programme activities. The majority of respondents called for GEO to establish rules of engagement with the commercial sector including integrity, independency, privacy and ethics principles. The majority of interviewees were also unaware of the existence of the Rules of Engagement with the Commercial Sector, which already address some of these items. This points to the existence of a communication gap across the organization. Those who were aware of their existence, noted that these rules currently provide very general principles for engagement that GEO should develop further in the future to address IPR and privacy with a more comprehensive approach. Some informants believe GEO is not engaging enough with the commercial sector, especially those having better resources and technology and they feel GEO is lagging behind in the development and application of technologies compared to the commercial sector.</p>	<p>increase awareness regarding the existence of Rules of Engagement with the Commercial Sector, that represent a flexible framework for engagement. A minority of the GEO community is aware of the existence of this framework, while many do not realize that this is already established.</p> <p>Given that GEO already has some basic principles laid out on IPR, it should work to make these clearer, develop these further in light of the work of the Data Working Group on IPR and privacy and evaluate how it should engage with different opportunities, given the role it is asked to play in each exchange with the commercial sector. In doing so, GEO may wish to explore, based on the nature of the commercial sector engagement, the use of solutions as memoranda of understanding, or tools such as CRADAs to ensure the establishment of a set framework to carry out such engagements in a collaborative fashion. Lastly, Regional GEOs and the GEO Secretariat would be best placed to play a key role to foster engagement with the commercial sector by assuming a more central role in brokering engagement and matching potential partners at a regional and global level with GEO Work Programme activities. The potential for an</p>	<p>Notwithstanding these achievements, the Executive Committee agrees that engagement with small, medium, and micro-sized enterprises (SMMEs) has not progressed as far as had been hoped. We recognize, however, that the number and diversity of SMMEs globally, as well as their limited resources for engagement with GEO, presents a much greater challenge than with larger firms. The Executive Committee agrees that the Secretariat should lead GEO’s engagement efforts with the commercial sector, and that the GEO Work Programme, with additional engagement support from Regional GEOs, be leveraged to support this engagement.</p> <p><i>The Executive Committee calls on GEO Members and the Regional GEOs to be proactive in engaging with SMMEs within their countries and regions and brokering their interaction with GEO.</i> GEO members can and should involve SMMEs in national delegations, where appropriate, and informing them of GEO events and opportunities that may be of interest to them.</p> <p><i>The Executive Committee requests the Secretariat to prepare a discussion on</i></p>
<p>12 Cloud Credits and License Programmes: The Cloud Credits and License Programmes have been mentioned by the majority as a positive example of engagement with the commercial sector with a clear value</p>		

Key Finding	Recommendation	Management Response
<p>proposition aimed at promoting the use of Earth observations and skills development in developing countries. Informants suggested GEO should look at ways to make this engagement and the benefits derived from it become long-term by ensuring participants can retain and continue developing the skills acquired through the programme and that the programmes should become increasingly tied to the GEO Work Programme. By highlighting a disparity in the capacity levels of different participants, the programmes showed how further work is needed from GEO to support capacity development on the use of Earth observations.</p>	<p>incubator supporting SMMEs active in the field of Earth observations may also be considered.</p>	<p><i>SMME and GEO based on lessons learned and experience amassed to date.</i></p> <p><i>The Executive Committee also requests that the Programme Board review the status of its Private Sector Subgroup, based on the experience since its establishment, to determine which objectives it can reasonably achieve.</i></p> <p>The Executive Committee accepts the finding that the existing framework for commercial sector involvement in GEO is not well understood by the GEO community. <i>It therefore requests that the Secretariat review its current communications to the commercial sector for ways to clarify and give greater prominence to these messages.</i></p>
<p>13 Small, Medium and Micro Enterprises: Even though GEO’s engagement has increased in recent years, respondents feel that GEO has so far shown little or no satisfactory engagement with the commercial sectors in SMMEs. GEO is perceived to engage more with multinational technology companies that conform with the GEO rules of procedure or afford the prospects of big grants. SMMEs, on the other hand, cannot compete with what can be offered by bigger companies at the international level and have structural barriers to engagement represented by limited</p>		

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<p>opportunities and resources. Key informants feel that GEO should also engage more with SMMEs, diverse companies from different geographies and with different sizes, particularly in developing and least developed countries, with a clear plan to address structural barriers and equally pursue involvement with all of them. This perception stems from miscommunication more so than a lack of interest on GEO's part to engage with the SMMEs where a lot of the engagement with SMMEs and companies not involved in the Cloud Credits and License Programmes happens at the level of the Work Programme and is not publicised by the Secretariat. Some of the structural reasons limiting SMMEs engagement can be helped by better coordination but calling for a "level playing field" misses some of the structural challenges and does not fully consider all of what GEO attempted to date. However, there is room for improvement, especially where the need to communicate better and clarify existing misconceptions is evident, and to improve coordination through an increased role of the Regional GEOs and the Secretariat.</p>		
<p>14 Awareness: There is a general lack of awareness on the role of the Trust Fund and</p>	<p>To favour awareness of the Trust Fund, its role and function, and to encourage contributions</p>	<p><i>The Executive Committee fully concurs, and requests that the Secretariat include</i></p>

Key Finding	Recommendation	Management Response
<p>how it serves to support the operations of the GEO Secretariat, but also about the Standing Agreement and consequently the administrative arrangement in place between the GEO Secretariat and the WMO. This is demonstrated by the high percentage of respondents who chose not to address the question on the Trust Fund or declared they did not know enough to answer this question. This finding points to the need for systematic and continuous communication within the organization on priorities such as the GEO funding model, its functioning and role which allows the Secretariat to continue its operations.</p>	<p>to it from GEO members and stakeholders, GEO should communicate its value proposition more clearly across the entire organization and highlight the importance of the GEO Secretariat and the role it plays in coordinating GEO's activities. This could be achieved by i) continuing to use public campaigns of commitment to show members' engagement such as the GEO Pledge campaign, ii) encouraging secondments and other in-kind contributions from all GEO members in line with the amounts suggested in voluntary indicative scale of contributions, iii) promoting more the role and value provided by GEO as a leading organization in the field of Earth observations, and by iv) actively exploring potential donors that GEO has not approached yet in order to diversify its donor base.</p>	<p><i>consideration of this issue when devising the strategy for communicating the value of GEO as outlined under Key Finding 1, recommendation sub-point iii in particular.</i></p> <p><i>The Executive Committee also requests that the Budget Working Group take into consideration the findings and recommendations of the evaluation in future iterations of the GEO Pledge campaign.</i></p> <p>Finally, the Executive Committee recognizes value of a dedicated resource mobilization coordinator within Secretariat to lead the development of a comprehensive strategy that would address this recommendation.</p>
<p>15 Funding Model: The majority of interviewees and respondents to the surveys are in favour of maintaining GEO's voluntary funding model of best-effort cash or in-kind contributions to the Trust Fund. The majority believes that rather than shifting to a model requiring a minimum mandatory contribution, the current model should be optimized promoting an increase in the number of contributors, in the amounts contributed by each member and the number of in-kind contributions including secondments from member states, Participating Organizations</p>		

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<p>and Associates. This can be done by promoting contributions according to the voluntary indicative scale of contributions, promoting public campaigns of support for GEO, exploring new funding opportunities and by enhancing members' perception of GEO value proposition through continuous engagement and better communication. In fact, it seems that the underlying issue behind the low level of contribution to the Trust Fund is the need to better define GEO's value proposition.</p>		