

Proposed Process for Review of Implementation Plans

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

1 INTRODUCTION

This document presents the Secretariat recommendations for the process of reviewing the 2023-2025 Implementation Plans for GEO Flagships, Initiatives, and Regional GEOs. The review process is expected to comprise the majority of the work of the Programme Board (PB) in 2022.

2 BACKGROUND

The activities that comprise the GEO Work Programme (GWP) are collectively the primary means by which GEO achieves its Vision and Mission. The PB provides an essential role in shaping the GWP.

Responsibility for the development of GWPs is shared between the PB and the GEO Secretariat.¹ The Secretariat is responsible for initiating the development of the GWP and for supporting the PB on its finalization. Secondly, as it is responsible for implementing and/or supporting the Foundational Tasks, the Secretariat has a key role in proposing the structure and composition of these activities. Lastly, the Secretariat is responsible for reviewing and recommending acceptance of Pilot Initiatives (formerly Community Activities).

In the GWP development process, the PB is responsible for:

- Approving the criteria for acceptance of GWP activities;
- Reviewing the Implementation Plans (IPs) of proposed GEO Flagships, Initiatives, and Regional GEOs, and deciding on whether they should be included in the GWP and within which category; and
- Recommending the GWP for acceptance by the GEO Plenary.

At the 21st PB meeting in September 2021, the PB approved:

- The criteria for acceptance of GWP activities (see Annex A);
- The objectives for the 2023-2025 GWP (see Annex B); and,
- The general process and tentative timeline for the development of the 2023-2025 GWP (see Annex C).

The focus for this document is to provide additional details regarding the review of the IPs, including a proposed set of Review Teams, and adjustments to the timeline which are necessary due to delays in the completion of the online IP tool.

¹ As specified in the GEO Rules of Procedure.

3 REVIEW TEAMS

3.1 2020-2022 GEO Work Programme

The use of teams of PB members to review IPs from prospective GEO Flagships and Initiatives has been the practice since the PB was established in 2016. For the development of the 2020-2022 GWP, a total of 10 teams were used:

Atmosphere	Geographic
Climate	Land
Cross-cutting	Regional
Disaster resilience	Urban
Ecosystems	Water

The teams were organized loosely along thematic lines to align with PB representatives' interests and expertise, plus one team for activities that were not thematically-focused and thus cut across the thematic areas, one team for activities based on specific geographic areas, and one team for Regional GEOs.

Each of the teams had ostensibly six or seven members. Most of the teams were assigned to review either three or four IPs. A total of 41 PB representatives participated in the review process. Of those PB representatives who volunteered to participate on the teams, most joined two Review Teams. More than one-third of representatives did not participate in any Review Team. Each of the teams chose one of its members to serve as team lead, whose role was to guide the discussion during team teleconferences and to present the results of the reviews at the PB meetings.

In practice, most reviews were conducted by three or four team members, plus the Secretariat. Participation was limited due to a combination of the geographic spread of the team members and conflicts with their own work and personal schedules. Teams generally would have preferred having participation from additional reviewers.

Most PB reviewers were not experts in the topics on which the initiatives were focused. Some PB members who did have such expertise were, in some cases, participants in the initiatives under review, which limited their role due to conflict of interest considerations. Review comments on the plans focused mostly on project management matters, with less focus on scientific or technical matters. While this was consistent with the review criteria, the teams did indicate that they would have appreciated having the plans reviewed by technical experts in some cases.

3.2 2023-2025 GEO Work Programme

There are currently 28 Flagships and Initiatives in the 2020-2022 GWP. In addition, some current Community Activities are expected to apply as GEO Initiatives. The total number of Flagship and Initiative IPs for review is expected to be between 30 and 40. Based on the experience of the 2020-2022 GWP, the Secretariat suggests that the number of teams be reduced to six, with the expectation that each team would review between five and seven IPs, the exact number dependent on the number of new applications as GEO Initiatives. A reduced number of teams will simplify the management of the process, allow for more members per team, and would avoid the need for PB members to participate on multiple teams.

This leads to the question of whether each team should have a thematic focus. The rationale for a thematic approach in the 2020-2022 GWP review was the expectation that this would enable Review Team members to encourage connections and synergies across the activities, to notice gaps, and to acquire an overview of the portfolio of related activities within the theme. In practice, this proved more useful in some themes than in others. For some themes, such as climate or disaster resilience, the alignment of particular initiatives to the thematic team was, while not arbitrary, certainly could not be comprehensive. The team mechanism could not serve to provide an overview of activities within the theme, a recognition that, in part, led to the formation of the Foundational Task Working Groups. Other review teams, such as the geographic and cross-cutting teams, did not reflect any deep similarities among the activities. The team where comparisons were most relevant was the one looking at the Regional GEOs.

At a more practical level, the thematic focus of the teams meant that Review Team members were widely distributed geographically. This made it difficult to schedule Review Team teleconferences, with the result that many team members were unable to attend. The thematic focus also meant that the workload among the teams was unevenly distributed due to the timing of when the IPs were ready for review.

Based on these considerations, the Secretariat proposes that for this review process, only the team reviewing the Regional GEO IPs will have a defined focus, largely due to the distinctive nature of these activities and because the template for the Regional GEOs is markedly different from that for the initiatives. For the GEO Flagships and Initiatives, the Secretariat proposes that PB members will be assigned to teams based on their geographic location to maximize participation in teleconferences and to facilitate scheduling. IPs will be assigned to the teams as they are ready for review, ensuring relative consistency of workload across the teams. Geographic proximity of the Flagship and Initiative leads will also be taken into consideration. As before, PB members will be asked to recuse themselves from review of GWP activities (both initiatives and Regional GEOs) in which they are participants.

4 DESCRIPTION OF THE REVIEW PROCESS

The review workflow will be revised to take advantage of the functionalities of the online system.

Each member of a Review Team will be granted access to the GWP system as a “reviewer” of certain IPs. Once logged in to the system, you will see a list of IPs for which you are a reviewer, and which are ready for review. On clicking on an activity name in the list, the screen will open to the IP content on the left side of the screen. The right side of the screen will contain comment boxes for each item in the IP. All reviewer comments will be visible to other reviewers, noting the name of the reviewer. Each reviewer may add comments, questions, or other remarks in any of the comment boxes. It is not necessary to comment in every section. If desired, a PDF version of the IP content may be downloaded for ease of reading or for printing, although all comments will need to be entered into the system so they may be tracked and will be visible to other reviewers and the activity leads.

Once an IP has been submitted for review by the activity leads, a defined period of time will be set for reviewers to complete their comments, usually two weeks, although this may need to be shortened in the case of late IP submissions. A teleconference of team members will be scheduled by the Secretariat shortly after the comment period ends. During the team teleconferences, team members will have the opportunity to discuss each of the comments and provide any collective remarks to the activity leads. For example, where an initiative is proposing

a change of category, these remarks may identify gaps in the proposal that may need to be addressed. The team will have an opportunity to do a final edit on their comments and then the comments will be opened to the activity leads to address; at this point the IP will also be re-opened for editing. A second round of review may be needed, depending on the nature and significance of the comments. Where the comments were relatively minor, the final review of the IP against the comments may be delegated to the Secretariat.

There are two key aspects to the review process:

- Providing advice to the GWP activity to focus, shape, adjust and otherwise improve their plan in ways that will maximize the likelihood of success of the activity; and
- Reaching a consensus within the Review Team on whether the activity should be accepted as part of the GWP, in which category (GEO Flagship, Initiative, or Pilot Initiative), and if there any specific modifications required to the IP to permit this acceptance. This second part of this process is based on the criteria for acceptance (see Annex A) which were approved at the 21st PB meeting.

There is a temptation during the review process for teams to focus excessively on the second aspect since the criteria provide a structured way of looking at the IPs. However, for most existing initiatives, there is little question of whether they will continue to be accepted and even under which category. Most of the benefit to them of the review process is through the detailed review comments and questions and the interaction the leads have with the Review Team members. This is certainly true for the Regional GEOs for which the criteria are not applicable. Review Team members are encouraged to approach their review broadly, looking at all aspects of the IPs and how they might be improved, rather than to focus narrowly on whether the criteria for acceptance have been met.

The team teleconference is a critical part of the review process, as it is during this teleconference that the Review Team prepares their recommendations on whether the proposed activity should be accepted into the GWP and in which category. The Review Team may also request additions or changes to the information provided by the activity leads. Following the provision of the information, the team members will once again have the opportunity to review and edit their comments. Depending on the decision of the first team teleconference, a second team teleconference may be required. To the extent possible, the Secretariat will seek to schedule team teleconferences so that more than one IP may be discussed, thereby minimizing the number of teleconferences that Review Team members will need to attend.

5 EXTERNAL REVIEWERS

Another component of the review process, which was requested by the PB following the 2020-2022 GWP development and will be implemented this year, is the use of external reviewers; that is, reviewers of the IPs who are not PB members or Secretariat staff.

The Secretariat will issue a call for external reviewers to the broad GEO community. The role of the external reviewers will be to provide additional perspectives on the strengths and weaknesses of the IPs, especially with respect to scientific, technical, and user perspectives. Invitation to serve as reviewers will also be sent to members of the Foundational Task Working Groups.

It is expected that external reviewers will participate in the review process in the same way as PB members. External reviewers will thus be granted reviewer access to the GWP system, will provide their comments in the same way as PB members, and will participate in the Review Team teleconferences. As with PB reviewers, they will not be permitted to act as reviewers of

any activities in which they are participants. External reviewers will also not be able to serve as Review Team leads; this function will be limited to only PB member principal and alternate representatives.

6 RECOMMENDATIONS

Based on the explanations above, the Secretariat seeks PB concurrence on the following points:

1. That there will be seven Review Teams, six of which will review GEO Flagship and GEO Initiative IPs, and one which will review Regional GEO IPs;
2. PB members may indicate their willingness to participate on, and to lead, a Review Team either during the PB meeting or by email following the meeting;
3. PB members who have offered to participate on a Review Team will be assigned to teams by the Secretariat, taking account of time zones to facilitate scheduling of teleconferences;
4. Following the meeting, the Secretariat will issue a call for external reviewers;
5. All Review Team members will be asked to identify any GWP activities in which they are involved as a participant at any level (not only as a lead);
6. GEO Flagship and GEO Initiative IPs will be assigned to Review Teams as they become ready, with the allocation being based on an even distribution of workload to the teams and not on a thematic basis;

Annex A: Criteria for Acceptance of GEO Work Programme Activities

	Pilot Initiative	GEO Initiative	GEO Flagship
General criteria	Open to participation by all GEO Members, Participating Organizations, and GEO Associates. Intent to develop open, re-usable solutions for applying Earth Observations for which there is a demonstrated need at regional or global scales Willingness to abide by the GEOSS Data Sharing Principles, Data Management Principles, and GEO Ethical Standards (Rules of Procedure, section 3.4)		
Rationale	The concept is plausible, and there is evidence that the need exists and is not currently met by others, including other GEO Initiatives.	Proposed outputs and expected use cases and benefits (outcomes) are described and are distinct from those of other GWP activities.	Current users of products/services are described and quantified if possible. Plans for expanding the user base are described.
Policy relevance	Relevance to an international convention or agreement is desirable but not mandatory.		Evidence of a decision or request to the candidate Flagship or to GEO from an international treaty, convention, programme, organization, etc. to provide specified information products/services.
Technical feasibility	Concept is plausible, appears to be technically feasible, and does not duplicate existing services.	Pilot or prototype information products/services have been demonstrated. Plan for scaling and expansion of scope is technically realistic and in proportion to confirmed resources.	Key challenges in moving to pre-operational services have been identified and a strategy to address them is described.
Planning	Expected tasks are reasonable in relation to the identified objectives and resources.	Tasks are clearly defined and have expected completion dates. Critical milestones are identified, with dates. Identified resources appear sufficient to implement the identified tasks.	Evidence of successful and timely completion of previous tasks and milestones.
Contributors	Team has sufficient expertise and experience to demonstrate the concept.	Team has the range of expertise and experience necessary to develop the proposed products/services. Team addresses considerations of gender, generational, and geographic diversity.	Team has the breadth of administrative, scientific and technical expertise and experience necessary to implement the described services. Team composition reflects gender, generational, and geographic diversity.
Resources	Contributions (financial or in-kind) from more than one GEO Member or Participating Organization.	Itemized list of contributions by type, including estimated value, provided. Funded coordinator/secretariat position or plans to obtain funding are described.	Medium-term funding (at least 3 years) sufficient to ensure continuity of products / services. Activity coordinator/secretariat position funded.
User engagement	Targeted users identified. User engagement plan describes how the activity will engage users in solution development.	User feedback from demonstration pilots or prototypes is provided and supports identified demand for products/services. Users are involved in the implementation and/or management of the Initiative.	List of organizations currently using the products or services and list of targeted additional user organizations provided. Feedback from users is regularly obtained and documented.
Governance	Lead(s) and Point of Contact are identified.	Initiative Lead(s) and Point of Contact are identified. The management structure is described, including identification of task or component leads. A Steering Committee or other oversight body is desirable but not essential.	Activity Lead(s) and Point of Contact are identified. Steering Committee or other oversight body is in place, and its roles and responsibilities described. The management structure is described, including identification of task or component leads.

Annex B

Objectives for the 2023-2025 GEO Work Programme

1. **Greater collaboration and integration** across GWP activities, with the aim of providing users with the greatest benefit from the collective resources provided by the GWP, as well as broader portfolios of solutions to address the engagement priorities. This will be implemented by a combination of Secretariat efforts before and during the development of the IPs and the advice from the PB through the review process.
2. **Stronger emphasis on open knowledge**, that is, the sharing of methods, models, algorithms, and other components required to replicate the solutions developed by GWP activities and to adapt them to specific circumstances. This should be viewed as not only fundamental to GEO's value proposition but is the essential foundation for capacity development. This will be realized through revisions to the review criteria, guidance materials to IP preparers, the Open Knowledge Statement, and other means as appropriate.
3. **More specific identification of intended/actual users** of the solutions they are developing and to involve such users in the development of those solutions from an early stage (co-design/co-production). While this will be reflected in the review criteria and guidance to the GWP activities, it should also be a key focus of the PB review process.
4. **Clearer definition of the GWP categories**, the expectations for transition between the categories, and the expected lifecycle of GWP activities. As was noted above, the review criteria during the 2020-2022 GWP development process were not finalized until after the call for IPs. It is the intent in this round to provide the criteria to IP preparers at the time of the call so they may use them as a self-assessment tool and address the criteria directly in their plans.
5. **Simplification of the IP template**, making use of standardized classifications where possible, as well as providing for online entry and updating of IP information. The Secretariat also intends to use the data collected for the IPs to populate the static fields of GWP activity webpages on the GEO website.

Annex C

Process and Timeline for the Development of the 2023-2025 GEO Work Programme

Excerpts from document PB-21.09.

PROPOSED PROCESS

The general outline of the 2023-2025 GWP development will follow the approach used for previous GWPs, with some new elements (in italics):

- Step 1.** The Secretariat issues a call for new IPs, including for activities currently in the GWP. The call will include a request for new activities to address the engagement priorities, including the new priority of Resilient Cities and Human Settlements.
- Step 2.** GWP activity teams prepare their draft plans. The Secretariat will provide one-on-one guidance as required, *and will work with specific GWP activities, groups of activities, and/or communities to encourage re-focusing, integration, or cross-linkages*. The Secretariat will also do an initial review of the IPs against the review criteria to ensure that the IPs are reasonably complete prior to the PB review.
- Step 3.** Review teams composed of PB members, *supplemented with external experts*, review the IPs of candidate Flagships, Initiatives, Regional GEOs, and Foundational Tasks. The review process will include preparation of written comments to be provided to IP drafters, as well as teleconferences with each activity to discuss the comments and recommendations in greater detail.
- Step 4.** The GEO Symposium will provide an opportunity for the Flagships, Initiatives, Regional GEOs, and Foundational Tasks to present a summary of their plans to the GEO community and to obtain feedback. It will also be an opportunity to further develop the aspects of integration and cross-fertilization across the GWP.
- Step 5.** GWP activity leads submit revised IPs to respond to the review team comments and the feedback from the GEO community.
- Step 6.** The Secretariat compiles the IP summaries into the first draft of the GWP summary document and circulates it to GEO Principals for comment and for offers of additional participants and/or contributions.
- Step 7.** The Secretariat prepares a revised version of the GWP summary document for PB approval.
- Step 8.** Presentation of the 2023-2025 GWP for Plenary acceptance.

PROPOSED TIMELINE

Changes since the 21st PB meeting shown in marked text.

Timing	Action
PB-21: September 2021	Agree on objectives, process, timeline, review criteria and IP templates.
21 October 2021	Secretariat issues call for IPs
GEO Week 2021	PB co-chairs inform Plenary of the GWP development process and timeline
Week of 14 February 2022	Secretariat issues call for IPs
PB-22: January 2022	Secretariat proposes Foundational Task structure and detailed review process
Early February mid-March 2022	Deadline for submission of IPs. Review process begins.
57 th ExCom meeting: March 2022	Update to the Executive Committee on GWP development.
GEO Symposium: late March / early April early May 2022	Consultation with the GEO community.
PB-23: April/May June 2022	Assess review status and recommendations for each of the GWP activities.
End June 2022	Deadline for submission of revised IPs.
June/July 2022	Draft GWP summary document sent to GEO Principals for consultation and additional contributions.
58 th ExCom meeting: July 2022	Update to the Executive Committee on GWP development.
PB-24: September 2022	Final PB review and approval of the GWP.
September/October 2022	2023-2025 GWP summary document sent to GEO Principals for approval at Plenary.
GEO Week 2022	Approval of the 2023-2025 GWP.
December 2022	Final version of the GWP summary document, incorporating changes from Plenary, is posted on the GEO website.