

# Monitoring and Assessing Progress of Work Programme Activities

## Designing a monitoring process and Key Performance Indicators (KPIs)

As stated in the Strategic Plan Reference Document, “the purpose of monitoring is to track the progress of the GEO Work Programme (GWP)”. The information collected through the monitoring process can be used in several different ways to support this ultimate purpose:

- Some, particularly qualitative descriptions, may be used in progress reports to Plenary;
- Some, particularly quantitative data, may be used to generate KPIs which allow for tracking change over time using consistent methods and definitions;
- Some, both quantitative and qualitative, may be used to prepare more detailed analyses.

All of the monitoring information should ideally relate to decisions (or recommendations for decisions) that will be taken by Programme Board (PB), Executive Committee or GEO Plenary. As the principal GEO body responsible for oversight of the Work Programme, PB is in the best position to determine the needs for monitoring information.

## Functions and Duties of Programme Board Relevant to Monitoring

The key functions and duties from the PB terms of reference (see Annex 1) that are relevant to monitoring are as follows:

- Ensure overall coherence and alignment of the GWP;
- Align the scope and substance of GWP activities with the committed resources;
- Review progress of GWP activities;
- Review proposed Implementation Plans (IPs) for GEO Initiatives and take decisions to accept new ones; and
- Promote the engagement of stakeholders in GWP implementation.

The PB mandate is primarily focused on the management of the GWP. Its key decision is to recommend a GWP to Plenary which, in turn, involves a series of subsidiary decisions, including:

- Whether an activity should be included in the GWP;
- To which category of implementation mechanism an activity will be assigned;
- Whether an activity can move up to a higher category (e.g. CA to Initiative);
- Whether activities should be merged;
- Whether Initiatives need to modify their IP; and
- Other decisions (e.g. removal of an activity from the GWP).

Initial PB decisions on these topics are based on the IPs submitted by the activities which do not require monitoring information to support. Monitoring is relevant in reviewing the extent to which GWP activities are successful in implementing their plans and, thereby, supporting any PB decisions that would flow from that review. However, criteria for this review have not been explicitly defined.

Criteria for establishment of GWP activities are described in the Strategic Plan Reference Document (see Annex 2). These criteria could be used as a starting point for determining the information required for progress reporting under certain assumptions, including:

- That at least some GWP activities will aim to move to another category, i.e., from Community Activity (CA) to Initiative or from Initiative to Flagship. This would imply that

monitoring information could help determine how close or far the activity was from meeting the requirements of the next category, even before the activity submits a new or revised IP; and

- That at least some amount of progress or advancement of implementation is expected of all activities. Monitoring could provide some assurance that the activities were being actively implemented. However, the action PB could take in the event that an activity was inactive does not appear to be clearly defined in the PB Terms of Reference.

### **Expectations for Implementation Mechanisms**

The description of the relationship between the categories of Implementation Mechanisms in the Strategic Plan is somewhat contradictory:

- On the one hand, it says that the categories of GWP activities “differ in degree of maturity” and that they should “be proactively nurtured towards transitioning into operational services that deliver societal benefits”.
- On the other hand, it also states that there is “no hierarchy between GEO actions implemented through different mechanisms in terms of importance, nor is there a necessary progression”.

These statements could be reasonably interpreted to mean that – at least for CAs, Initiatives and Flagships – there is a sense of an ideal process of maturity of an activity from initial conception to sustainable operational implementation. In this interpretation, which does not differ substantively from that expressed in the Strategic Plan Reference Document (see Annex 3), the stages are as follows:

- CAs identify an unmet need or gap relevant to GEO’s mission and assemble a team of participants willing to work on defining and pilot testing potential products and services that could meet this need;
- Initiatives move from prototype services and assemble the resources needed to transform these into products and services that can be produced regularly and that have benefited from user engagement and feedback; and
- Flagships should have established a suite of products and services for defined users and work toward consolidating a policy mandate, obtaining sustainable funding, and finding an organizational home from which they can continue to operate indefinitely (i.e., possible transition out of the GWP).

It should be recognized that this maturity model would not necessarily apply to Foundational Tasks or perhaps also to Regional GEOSS Initiatives. These may require different criteria for assessment. The extent to which it does not apply to all existing CAs may also be an issue requiring some further clarification.

### **Using the Maturity Model as the Basis for Work Programme Monitoring**

If the maturity model approach were accepted, it could form the basis for GWP monitoring and progress reporting:

- Monitoring would focus on collecting information needed to assess the extent to which the GWP activities were progressing in meeting the criteria for the next category. For example, CAs would be asked for and assessed on the criteria for acceptance as Initiatives.
- In the early stages, it would be expected that activities would meet few of the criteria for the next level, but that this would change over time. The intent would be to ensure that activities were progressing and, if not, how they might be assisted. Since each activity

would have begun in 2016-17 from a different starting point, the number of criteria being met would not provide a meaningful comparison between activities in terms of their success.

- This approach to monitoring and reporting would provide useful information to PB, to the GWP activities themselves, and to Plenary, as it would identify the specific strengths and weaknesses of each GWP activity and thus where more attention may be needed. It could also support summary reporting that could identify issues common across activities.

To translate the IP review criteria into a set of monitoring requirements, it is necessary to separate out criteria which are critical to progression to the next level and which are common to all activities from those criteria that merely identify requested content in the IP. It will also be necessary to review these criteria to ensure that they are sufficiently clear so that all relevant players – GWP activity participants, PB reviewers, Secretariat staff, ExCom and Plenary – share a common understanding of what is required to meet the criteria and why they are important.

Key criteria for the CA to Initiative transition are (compare to Annex 2):

- User need identified [*“application perspective” is not clear*]<sup>1</sup>;
- Pilot or prototype information service or product developed or demonstrated;
- User institutions identified; and
- Sufficient resources for activities identified and committed [*more clarity on determining sufficiency needed*].

Key criteria for the Initiative to Flagship transition are:

- Policy mandate from an international organization (or equivalent evidence of ongoing demand for the Initiative’s products / services);
- Information service or product provided pre- or near-operationally;
- User institutions fully engaged, including mechanisms to enable steering and feedback, e.g., active role in Steering Committee. [*reference to “specific” institutions not clearly distinct from previous level*]; and
- Sufficient resources identified and committed for the medium-term [*which may include in-kind resources*].

Key criteria for the Flagship to transition out of the GWP would be (not in Annex 2 but inferred):

- Confirmed organizational host; and
- Sustainable resourcing (i.e., does not require ongoing in-kind voluntary commitments).

The following additional requirements in the criteria for acceptance as a CA might strengthen the application of the model:

- Identification of an unmet user need or needs that activity aims to address;
- Initial proposals of the information services or products that would be produced to meet this need or needs; and
- Identification of potential users of the services and products [*would not need to be specific organizations*].

These changes would permit strengthening the expectations for Initiatives:

- The user needs to be addressed should be not only identified, but also validated through the pilot testing and initial feedback from users; and

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<sup>1</sup> Italic text in square brackets provide comments on text referenced from other sources.

- User organizations should be not only identified, but also consulted regarding the pilot services / products.

### Implementing the Maturity Model Approach

Despite a need for clarification of some of the criteria, it should still be possible to identify the information required to assess progress against the criteria. The table below provides an initial summary of the current availability of the required information. Availability (“Yes” in the right-most column) means that a process or source for this information exists, although the information regarding a specific GWP activity may be incomplete at the present time.

Criterion	Applies To	Information Required	Currently Available
User organizations identified	CA	List of specific potential user organizations	Yes
User organizations consulted	CA	List of methods used to obtain feedback from users	Yes
User need validated	CA	Results of feedback from consultation with potential or actual user organizations	No
Information product or service developed	CA	Identification of products and services to be developed by the GWP activity and their status.	Yes
Sufficient resources contributed (pilot phase)	CA	List of contributions (financial and in-kind)	Yes
Policy mandate recognized	GI <sup>2</sup>	Identification of the intended source (e.g. Convention or organization) and the status of obtaining recognition of the role of the GWP activity in relation to this source	No <sup>3</sup>
Product or service pre-operational	GI	Identification of products and services to be developed by the GWP activity and their status, <i>plus additional detail regarding frequency of updates/distribution and statistics on usage</i>	Partial
User organizations fully engaged	GI	List of user organizations involved in key roles in the GWP activity (e.g. members of steering committee or co-leads of activity)	Yes
Sufficient resources for medium-term	GI	List of contributions (financial and in-kind) <i>in comparison to medium-term requirements</i>	Partial <sup>4</sup>
Organizational host identified	FS <sup>5</sup>	Identification of potential host organizations and status of discussions regarding hosting	No
Sustainable resourcing	FS	List of contributions (financial and in-kind) <i>in comparison to operational requirements</i>	Partial <sup>2</sup>

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<sup>2</sup> GEO Initiative.

<sup>3</sup> This information is requested in the IP as part of the transition plan to operational phase for Flagships, but is not currently included in monitoring.

<sup>4</sup> This information is requested in the IP in the summary of committed resources and annual budgets, but is not currently included in monitoring.

<sup>5</sup> GEO Flagship.

Much of the required information needed to support the monitoring of these topics was included in the initial data collection process in 2017:

- Products and services;
- User organizations;
- User engagement activities;
- Contributions to the GWP activities; and
- Individual contributors.

While this information remains incomplete due to some activities having not completed the tables and others providing only partial information, the existing monitoring process (as improved over time) offers a means of gathering a large portion of the required information.

From the table, the main gaps in information would appear to be:

- Results of feedback from consultation with potential or actual user organizations;
- Identification of the intended source of a policy mandate and the status of obtaining recognition of the role of the GWP activity in relation to this source;
- Frequency of updates/distribution of information products / services and statistics on their usage; and
- Medium-term and operational resource requirements, i.e. budget (financial and in-kind).

Of these gaps, the following may be able to be addressed through modifications to the existing data tables:

- Information on frequency of updates of information products and services;
- Information on the distribution of information products and services [*needs to account for products and services that are targeted to decision-making bodies rather than mass audiences*];
- Information on resource requirements [*needs a standard tabular format that can be applied across GWP activities*].

Information that may be best collected separately from the monitoring data tables includes:

- Results of feedback from consultation with potential or actual user organizations;
- Identification of the intended source of a policy mandate and the status of obtaining recognition of the role of the GWP activity in relation to this source;
- Statistics on usage of information products / services [*due to difficulty in standardizing reporting and dependence on information prepared for other purposes*].

### **Developing the Next Monitoring Request to GWP Activity Leads**

A decision is required very soon regarding whether leads of GWP activities should be asked to provide monitoring data and/or progress reports in 2018. This information would be intended to feed into three processes:

- Progress reporting to the GEO-XV Plenary in autumn 2018, which would include the 2017-2018 Highlight Report, but potentially an additional report or annex on each of the GWP activities;
- Analysis required to support the development of the 2020-2022 GWP; and
- Updating of GEO communications, particularly the GEO website pages describing the GWP activities.

There are several possible components of a potential request:

- Examples of how the activity has made an impact on policy, the environment, or on populations attributable, at least in part, to its work;
- Updating of information provided in the 2017 monitoring tables, perhaps including revisions to the tables to address the gaps identified in the previous section (i.e., updates and distribution of products and services; information on resource requirements);
- Collection of additional information, where available, to address gaps not suited to tables (i.e., feedback from users; statistics of usage of products and services; status of recognition of policy mandate); and
- Information to support GEO communications, e.g., simplified activity description and mission statement; key upcoming events; links to social media, communications sites and recent publications; communications contact person for the activity.

While coordinating these requests could reduce the overall number of requests going to leads, it is also important that the request not be overwhelming in its complexity. The views of Subgroup members will be valuable in balancing the content needs with practical considerations faced by GWP activity leads.

### **Summary of Key Issues for Subgroup Discussion**

1. Is the maturity model approach a suitable strategy on which to base GWP monitoring? What is missing? Is it workable?
2. Are the monitoring information requirements (table on page 4) complete? Is there other information not identified there that is needed as part of GWP monitoring (as opposed to part of the initial IP)? Is there information that is included that is not needed or relevant?
3. Should there be a request to GWP activity leads for monitoring information in 2018? Which items should be included in the request? Should any of the suggested items be left out or addressed in a future year?

## **Annex 1 – Excerpt from GEO Rules of Procedure**

As amended 26 October 2017

**5.1 Function:** The GEO Programme Board supports the on-going development and implementation of the *GEO Strategic Plan 2016 – 2025: Implementing GEOSS* through multi-year GEO Work Programmes.

Specifically, the GEO Programme Board:

- Works to ensure the overall coherence and alignment of the GEO Work Programmes with GEO’s Strategic Objectives and Core Functions;
- Works to align the scope and substance of tasks, GEO Initiatives and Flagships in the GEO Work Programme with the resources committed by Members and Participating Organizations;
- Supports and enables cross-cutting coordination and knowledge exchange, especially best practices; and
- Promotes GEO Work Programmes and engagement of stakeholders in their implementation.

**5.2 Duties:** The GEO Programme Board will:

- a. Review the scope and substance of activities proposed for the multi-year GEO Work Programme;
- b. Review the progress of GEO Foundational Tasks, Initiatives and Flagships;
- c. Recommend GEO Work Programmes (GEO Initiatives, Flagships, and Foundational Tasks) for Plenary acceptance; including assessing whether resources committed are commensurate to the activities scoped for inclusion in the Work Programme;
- d. Examine proposed IPs for GEO Initiatives and take decisions to accept new ones;
- e. Provide high-level recommendations to the Executive Committee;
- f. Nominate Participating Organization observers to the Executive Committee;
- g. Establish sub-groups to address specific topics as needed; and
- h. Undertake such other tasks as may be delegated to the Programme Board by the Executive Committee or the Plenary.

## Annex 2 – List of Criteria for Establishing GEO CAs, Initiatives and Flagships

Summarized from pages 17 to 24 in the *GEO Strategic Plan 2016-2025: Implementing GEOSS – Reference Document* and distributed at the 2<sup>nd</sup> Programme Board meeting, 5-6 May 2016.

### 1.2 Criteria for establishing GEO Community Activities

- Objective(s) shared by a group of interested partners;
- Multi-national stakeholder group or scope; and
- Relevance to GEO's Strategic Objectives.

### 1.8 Criteria for establishing GEO Initiatives

GEO Initiatives must meet all criteria used for Community Activities (see 1.2). In addition:

- User need or application perspective identified;
- Pilot or prototype information service or product developed or demonstrated;
- Contribution to satisfying user need;
- User institutions identified with plans to solicit their advice;
- Sufficient resources for activities identified and committed;
- Clear relevance to GEO's Strategic Objectives demonstrated;
- GEOSS Data Sharing and Data Management Principles implemented;
- Implementation Plan, detailing:
  - Objective(s), shared by partners;
  - The information service or product provided;
  - Schedule for implementation;
  - Perspective(s) for evolution;
  - Quantified, itemized resources, including from Members, Participating Organizations, private sector partners and the GEO Secretariat, enabling substantial progress towards objectives;
  - Partners, including target user groups;
  - Capacity Building activities
  - User representatives engaged, often in advisory roles;
  - Governance and management mechanisms; and
  - Monitoring and Evaluation procedures.

### 1.14 Criteria for establishing GEO Flagships

GEO Flagships must meet all criteria used for GEO Initiatives (see 1.8). In addition:

- Policy mandate from international treaty, convention, programme, or strongly articulated policy obtained;
- Substantial activity in terms of resources and partners involved;
- Information service or product pre- or near-operationally provided;
- User needs satisfied to a significant degree;
- Specific user institutions fully engaged, including mechanisms to enable steering and feedback by these, e.g. an active role in a Steering Board; and
- Implementation Plan (see 2.2), including also perspective(s) for operationalization.

### Annex 3 – Overview of Implementation Mechanisms

Page 25 of the GEO Strategic Plan 2016-2025: Implementing GEOSS – Reference Document

	GEO Flagships	GEO Initiatives	GEO Community Activities	GEO Foundational Tasks
Purpose / character	pre-/near-operational service(s) top-down	<b>pilot or prototype</b> service(s); top-down	develop, test, or demonstrate application(s); bottom-up	enabling or support function(s) top-down
Initiated by	Specified Members, Participating Organization		GEO Community	GEO Secretariat
Accepted by	Plenary	GEO Programme Board	GEO Secretariat Director	Plenary (with GPW)
Criteria	Policy mandate Near-operational Satisfies user need User institutions specified Resources identified and committed	Development, demonstration, pilot Targets user need Some users identified Resources identified and committed	Relevance to GEO's Strategic Objectives	Implements/supports GEO Core Function Sufficient resources, identified and committed in GPW
Management and coordination	Dedicated mechanism; coordinator		Community-based	GEO Secretariat or Working Group
User engagement	<b>Specifically identified</b> , fully engaged, role in steering.	Target user groups <b>generally identified</b> , with at least an advisory role.	May vary, depending on activity.	May vary, depending on Task.