Report from the Programme Board
2nd GEO Programme Board Meeting

5-6 May 2016, GEO Secretariat
Draft Summary Report

Note: all presentations referenced in the report may be consulted at:
ftp://ftp.earthobservations.org/Programme_Board/5-6_May_2016/presentations/

1   SESSION 1: START UP AND INPUTS FROM WPS & EXCOM TO WP 2017 – 2019

a)   Welcome and Opening

The opening remarks were delivered by Programme Board member Xingfa Gu on behalf of Board co-chair Li Pengde (China). He sent his regrets that his work assignments prevented him from participating in person, but he thanked the other Board co-chairs John Matuszak and Tim Haigh, and Secretariat director Barbara Ryan, for hosting and organizing the 2nd Programme Board meeting. He noted that the report from the 1st Programme Board meeting to the GEO Executive Committee had been well received, and that the Committee had expressed great expectations of the Board in terms of producing a viable GEO 2017-2019 Work Programme. He was also pleased that the 2016 WP Symposium and other side events, such as Asia-Oceania (AO) GEOSS, had been successfully concluded, and that the work for the Board was now becoming more concrete. He observed that one path of development for GEOSS would be a synergetic coordination of global, regional and national GEOSS's. Indeed, regional GEOSS's, such as AfriGEOSS, AmeriGEOSS and AO GEOSS, were advancing rapidly and are playing a significant role in connecting national and global GEOSS's, and thus should figure prominently in the GEO 2017-2019 Work Programme. He added that the new GEO Co-chair from China, Dr.Yin Hejun, Vice-Minister of Ministry of Science and Technology of China, attached great importance to development of the concept of regional GEOSS's, and perhaps the Board should consider transitioning the 3 regional GEOSS's into GEO Flagships for the GEO 2017-2019 Work Programme. In other areas of GEO, Dr. Li noted the Fourth High Level Forum on United Nations Global Geospatial Information Management (UN-GGIM) had been successfully held the previous month, with the outcome document "Addis Ababa Declaration: Geospatial Information Management towards Good Land Governance for the 2030 Agenda" being adopted. Meanwhile, China will sign a Memorandum of Understanding with the United Nations on Globeland30 datasets, which means the datasets will become global open data. Thus, under the umbrella of GEO, Globeland30 need extensive cooperation and data collection to support the 2030 Agenda for Sustainable Development. He concluded his remarks by assuring the Board he would be following the progress and outcomes of the meeting, and that Dr. Xingfa Gu was authorized to represent China on his behalf as alternate. He wished the Board a successful meeting with fruitful outcomes.

b)   Approval of agenda

The agenda was adopted without modification.

c)   Report from Executive Committee

Programme Board co-chair John Matuszak (USA) provided a briefing on the Board report to the 36th Executive Committee meeting. He noted that the Committee had been quite generous in the authority it had delegated to the Board to carry out its work, and with that authority came a great degree of responsibility. The Committee encouraged the Board to exercise its judgement in order to produce the best, most coherent GEO Work Programme possible, one that delivers what it says it will in a voluntary, best-efforts context. He observed that the primary task of this meeting of the Board was to is to review the proposals submitted for the GEO 2017-2019 Work Programme and make recommendations to the next Committee meeting in July. Thus, although not all the work could be accomplished at this Board meeting, it was therefore critical to respond to the specific tasks given to the Board and set in place the processes need to accomplish the work remaining after the conclusion of the meeting. Board co-chair Tim Haigh (EEA) added that the Committee expects the Board to be self-governing, and at some point the Board should carefully consider the nomination process for the 2017-2019 Board and co-chairs. At the July meeting, the Committee would be expecting recommendations from the Board in its report as to 1) continuing membership based on activities and contributions from current Board members; 2) encouraging a certain amount of turnover; and 3) reducing overall Board membership. He suggested this point be taken up again later on in the agenda when the functioning of the Board was discussed.

d)   Report from Work Programme Symposium

G. Rum (Secretariat) provided an update on the GEO Work Programme Symposium that had just taken place on 2-4 May 2016. Given that the main objective of Symposium was to provide a yearly opportunity for the GEO community to come together and connect, he felt the Symposium had largely been a success and that pertinent information had been provided for consideration by the Board, particularly on the importance of cross-cutting elements, such as capacity building and climate, within and across activities of the Work Programme. He also noted that several of the Board members had been able to participate in the Symposium, an aspect that was beneficial both in terms of providing a direct perspective to the Board on issues of concern to the broader GEO community, and of being the face of the Board within the community. Those Board members who were present at the Symposium concurred that it had been a beneficial experience overall, but offered areas for improvement. For example, one comment was that there should have been a more substantial discussion on content rather than how GEO manages and organizes its activities (e.g. more emphasis on Earth observations, latest achievements, and gaps in observations). Other comments included the need for more depth and review of progress across each activity of the Work Programme, and sessions on planning and strategy for better integration and coordination of the Work Programme. There was also a request for transparency on the part of the Board so that the GEO community is fully aware of, and informed about, requests that come from the Board. The director, Barbara Ryan, reminded the Board that a criticism of GEO's previous decade was that the Work Plan contained many activities going nowhere; now the Board had the authority from the Committee to fix this and put GEO on a critical path to successful achievement of it Strategic Objectives.

SESSION 2: REVIEW OF PB WORK ON IP TEMPLATE AND SCIENCE & TECHNOLOGY

a)   Contributions received and feedback on template from candidate Initiatives and Flagships

M. Sideris (IUGG) provided feedback on the template gathered mainly from the GEO Secretariat, and also one Initiative submission. Comments included:

- The template seems to be more aligned with Flagship service projects than Initiatives;
- The template seems to be aimed at well-developed Initiatives/Flagships;

- Asking for a full list of all participants and addresses challenging due to varying degrees of participation of individuals and the desire to expand involvement;
- Confusion over deadlines, how firm they are, and how often the WP will be updated;
- Some uncertainties in what was required: just for initiatives or for all, for transition period or for 2017-2019;
- The structure of the TOC asked for the same information in multiple places;
- Some confusion over what was wanted for the monitoring & evaluation components;
- Most difficult part was defining milestones;
- Most people seem to struggle with the chapter on resources - not only with the difficulties to mobilize additional resources but also with understanding which kind of information is requested here, in particular concerning cash contributions;
- Incorporate a short section describing what the added value of GEO will be (what's unique, what's the expected return of investment);
- Some not been happy with providing two separate documents (the summary and the application templates); and
- People were unsure about the general review process by PB and the associated deadlines (the general time line was not communicated).

In the Board discussion that followed, the point was made that a wide variety of responses had been received, and many implementation plans had not submitted what was requested. Also, some proposals were new, others for activities that had been running for years which suggested that the Board can't take a blanket approach to proposal evaluations. Rather a nuanced, dynamic approach was needed provide tailored feedback, such as - in case a proposal was not credible for a given year - what additional information was needed to improve its chances for the following year; the Board should be viewed as facilitators, not inhibitors. In general, the proposal review process still needed to be defined; standard procedure would be to divide them up among Board members who would then perform a panel review, according to standardized criteria. Additionally, the review panels could comment on the potential of some Initiatives to become Flagships.

Outcomes:
- K. Fontaine to lead subgroup for quick development of timeline with clear articulation on cycles and dates, potential ramifications, and suggested proposal review procedure; group to report on day 2 of Board meeting (see draft timeline).

b)   Science & Technology across WP

S. Marsh (UK) presented the work of the subgroup tasked with tracking the fate of various issues pertaining to science and technology, and assess whether they either have been resolved, or are adequately addressed in activities of current Work Programme. He noted the group had based its work primarily on the Science & Technology (S&T) Roadmap, developed by the former GEO Science and Technology Committee (STC) and its Annex, with the aim to identify anything in the S&T Roadmap that has not been accomplished, but remains relevant. The subgroup identified 3 items that fell into this category and made the following recommendations:

- Take into account both the GEO Label and Data Citation within the *branding* activity currently being developed.
- Consider S&T issues explicitly in future GEO Work Programme reviews; both the use of the state of the art in the existing activities and developing new activity from S&T advances. Documents that could underpin these reviews:
    - *GEO and Science (2010, ESA and STC)*
    - *Science and Technology Roadmap Assessment (Japan, 2016)*
    - *Observation and integrated Earth-system science: A roadmap for 2016–2025 (2016, COSPAR)*

o *Common Framework for EO Data (US Nat. S&T Council, 2016)*
- Extend S&T visibility & engage S&T Community in Forums.

R. Samors (Secretariat) provided an overview of current efforts to revise guidelines for GEO branding. He noted that the guidelines were designed to visually and thematically reinforce the *GEO Strategic Plan 2016 – 2025: Implementing GEOSS*, particularly GEO's mission, to connect the demand for reliable and timely environmental data and information with the supply of data and information available through GEOSS. He also commented that of GEO's three strategic objectives, Advocate, Engage, Deliver, there is a strong requirement for branding in advocacy – which subsequently reinforces the other areas of activity. GEO's Engagement Strategy contains overarching communications activities, developing messaging for targeted stakeholders, convening the GEO community and developing partnerships – all of which necessitate recognizable and consistent branding.

Discussions following the presentations focused on primarily two issues identified by the S&T Roadmap that were still relevant, but not yet resolved: data citation and the GEO label. With respect to the former, the point was made that a standard was needed for the way in which data can be cited, and a good place to start would be the standard developed by Research Data Alliance (RDA), but it would be premature to commit to this as "The standard for GEO" just yet. Comments agreed that it is of value to say that data was discovered through GEOSS, and that data adhere to both GEO Data Sharing and Management Principles. Regarding the GEO label, the QUAlity aware VIsualisation for the Global Earth Observation system of systems project (GeoViQua) had made recommendations for a spatial quality indicator, and this should inform any further work on developing a GEO label.

Outcomes:

- The original subgroup was retired.
- A new subgroup led by Joan Masó (Spain) will work on developing specific recommendations with respect to data citation and the GEO label [3rd PB meeting, 7-8 September 2016].
- Any comments regarding the guidelines for GEO branding can be made directly to the Secretariat.

SESSION 3: CONTRIBUTIONS TO 2017 – 2019 WORK PROGRAMME: FOUNDATIONAL TASKS

a)   GEO Foundational Tasks

F. Chavez (POGO) delivered the results of the analysis by the subgroup that examined the current Foundational Tasks (FTs), with a view towards recommendations for potential prioritization against a context of shrinking budgets, especially where the Secretariat is concerned. The subgroup report found that Secretariat Operations (SO) tasks dominate the time of the Secretariat staff (71.2%), and that aligning Secretariat resource utilization while ignoring the SO tasks would be very difficult. Next Community Development (CD) tasks take up 6.1% of Secretariat time (22% of total effort) while GEOSS Development and GCI Operations (GD) consume 22.7% of Secretariat time (7.7% of total effort). Suggestions from the group included:
- Structuring the technical activities (GD) around four core tasks: Needs, Data, Infrastructure and Coordination. Development of needs could be carried out by the Community Activities (CAs), Initiatives and Flagships with minimal Secretariat support.
- Priority should be given to in-situ observations because they are more complex, unevenly distributed in space and time, heterogeneous and less organized. Given that in-situ and satellite observations are intimately related and dependent, a suggestion was put forth for GEO to consider the formation of a new oversight committee with 4 co-leads from Participating Organizations (POs) with expertise in satellite (2) and in-situ (2).

- An overarching new FT on data should be established, which would include essential elements of GD-01, GD-03, GD-04, GD-07 and GD-11. The FT would be governed by co-leads from data sharing, dynamic data storage, data preservation and data transmission. Once developed the GCI would be subsumed into the data FT.

Further, the subgroup developed an initial set of criteria for further evaluation of FT importance and effectiveness:
- Streamline use of secretariat resources, with focus on highest priorities.
- Optimize Member and PO engagement to drive outcomes.
- Efficient management with focus on implementation feasibility of Foundational Task.
- Support the success of GEO CAs, Initiatives and Flagships.
- Build GEOSS with greater efficiency and effectiveness.
- Enhance the visibility and use of GEO resources.
- Identify and prioritize the gaps and critical elements that GEO should pursue.
- Increase synergy and reduce duplication/overlap between Foundational Tasks.

In the discussion that followed, the Board made the following observations:
- The pattern of organization and resourcing is similar for GD and CD, but different for SO tasks; therefore there is a need to look at SO FTs differently from the others (GD and CD).
- Options should be explored for SO2-4, but leave SO-01 (management and support) should be "ring-fenced" unless the Executive Committee suggests doing otherwise.
- 100% of GEO SEC resourcing is allocated to FTs, ~70% to SO and ~30% to other FT; however total resourcing is much greater as it includes substantial community contributions particularly in GD and CD tasks, where there may also be strong leadership in GEO community
- Due to the above, when a member of the Secretariat is allocated to a SBA or Flagship, then their activities need to be connected to FT tasks. For many GD and CD FTs, the Secretariat staff time contribution is not very great (a part of 30%) but it might nonetheless be significant.
- There is a need to bring clarity about which FTs are a priority, for GEO taking into account:
  o Community buy-in – calls for contributions, deferring if it doesn't materialize.
  o Taking a systematic approach – need to look at expected results from Strategic Plan (Reference Document) and the extent to which FTs are supporting and critical for accomplishing the results / Inititiatives and Flagships. Recommendations from Plenary, the Executive Committee and policy fora in relation to priorities for FT.
  o A reality check on FTs – are expectations realistic? GEO needs to focus on attainable results.
  o Where GEO can demonstrate its added value.
  o Numerous potential schemas for criteria suggested by the PB to maximize impact / value for money.

Outcomes:

- Subgroup continued, led by F. Chavez.
- The work of the extended subgroup needs to bring together different criteria schemas and propose a realistic combination that can be applied to FT and used to create a priority list.
- The first stage (bring together criteria, schema info and need) to be brought together in coming weeks and applied to FT; and then circulated to PB members for review before submission of recommendations to the Executive Committee [20th June].

b)   Monitoring & Evaluation across WP

M.-J. Bourassa (Canada) presented the work of the subgroup on Monitoring and Evaluation / Performance Indicators. The group concluded that:

- The M&E WG recommendations have largely been implemented in the current Work Programme structure.
- Foundational task SO-03 should refine the M&E framework for PB consideration, supported by M&E specialists:
    - The logic model (functions, results, indicators) should be adopted.
    - The methodology and data sources should be refined.
- SO-03 should develop an evaluation plan and a monitoring plan for PB consideration taking into account the role set out for PB in the Strategic Plan, the differences between monitoring and evaluation (only 2 evaluations foreseen) and the need to keep monitoring lightweight and based on what was already done as good practice within implementation mechanisms:
    - These plans should formalize scope, process, and resources, and establish a baseline allowing to set targets for the following years.
- Implementation plans should be reviewed to ensure M&E is addressed.

Outcomes:

- Subgroup established, led by J.-M. Bourassa, to formulate [3rd PB meeting]:
    - input into PB ToR for M&E framework.
    - guidelines to make better use of Initiative/Flagship reports, referencing SDGs, climate, cross-cutting issue agendas.

SESSION 4: CONTRIBUTIONS TO 2017 – 2019 WORK PROGRAMME: COMMUNITY ACTIVITIES AND INITIATIVES/FLAGSHIPS

a)   GEO Community Activities

S.-J. Khalsa reported on the efforts to match Board members with Community Activities (CAs). He recalled that, although this type of interaction is not specifically called for in the Board ToR, there had been consensus at the 1st Board meeting that Board members be encouraged to "mentor" CA, as a means to foster engagement and provide an interface between the activity and the Board. A spreadsheet had been created to facilitate the "signing-up" process, and eventually 33 CAs were matched with 16 Board members. However, the way forward at this point was unclear to the group; for example, what should be the timeline for initiation/termination of the mentoring relationship? Should a common set of guidelines be developed that would govern the interactions? The group was concerned that the correct message be conveyed, which is that the Board is not providing oversight or monitoring, but simply wishing to stay informed so that it can make connections and offer solutions/guidance on an as needed basis.

Outcome:

- Subgroup ends, activity suspended for the time being.
- Secretariat to take note of spreadsheet and directs requests from CAs to PB appropriate member on an "as needed" basis.

b)   GEO Initiatives/Flagships

T. Haigh (EEA) presented the results of the survey for completeness of the GEO Initiatives in the current transitional GEO 2016 Work Programme, using criteria derived from the Strategic Plan Reference Document as a benchmark. Key results included:

- Of the 21 Initiatives in the current Work Programme, only 5 candidates were rated above average.
- Some "umbrella" initiatives were so broad the presented a lack of credibility and made it difficult to comprehend what the initiative will actually do.
- Statements in some initiatives suggest a better mapping to Community Activities.
- "Landgrab" Initiatives were written as a (future) plan to gather contributors, financial support, and other resources.
- Often user engagement details lacking.
- Sometimes no information, sometimes very long lists of people with no clarity on what they are contributing or receiving. Sometimes no lead or point of contact.
- The extent of involvement of GEO members and participating organisations is very difficult to ascertain. Representatives in GEO governance structures can keep oversight of involvement in GEO.
- Some initiatives have dedicated contacts in GEO secretariat. This support should be made clearer.
- In some cases, the subgroup was aware that initiatives were in fact resourced, but the information was not presented in 2016 transitional work programme. On the other hand, some Initiatives tended to include what seems to the budget of an entire organization as the contribution to GEO.
- Making ambitious statements not backed but realistic resource commitment undermines credibility at all scales and makes managing dependencies difficult.
- The Programme Board has a role to play in communicating gaps in resourcing, but cannot do this if there is no information provided or understand them.
- The GEO programme Board focus initially on aspects where there is a need for additional or complimentary resourcing, as well as highlighting important deficiencies to GEO governance and caucuses.
- The GEO community pools resources: most successfully organised initiatives contain a variety of sources/types. Single source of financing is often co-financing.
- Connecting resources which are allocated to a project output with a GEO activity provides transparency.
- Resourcing can be expressed in monetary value or time (preferably using just one in an initiative). Suggest working with 5000 dollars or Euro or PM.

Outcomes:

- Subgroup, led by K. Fontaine, formed on review process design and criteria guidelines.
  - Key element: 3 reviewers per proposal, 1 lead (PB main rep) and 2 reviewers (main and/or alternates).
  - Lead reviewer should be familiar with proposal domain, and not part of proposal.
  - Transparency of process, clear communication paramount; review criteria should be applied judiciously.
  - Single review process for Initiatives and Flagships.
  - There can be any number of Flagships for a given SBA.
  - Level of rigor should be designed to ensure highest quality Flagships.
  - Timeline proposed for review process (see Appendix A).
- T. Haigh to oversee early offer of initial cross-check for completeness on Initiative proposals for the 2017-2019 Work Programme that had been submitted by the initial 15 April deadline for those proposals desiring it

SESSION 5 OUTCOME: CONSENSUS ON PB FUNCTIONING; NEXT MILESTONES TOWARDS 2017-2019 WP DEVELOPMENT

A number of strands of discussion were brought together in this session. In the setup phase of the Board, the membership had been reconfigured from expert members to representatives and subsequently allowing also alternates to participate. Furthermore the number of PB members was currently in excess of the ToR. This situation had given rise to many people sitting around the table at the first meeting and different perspectives around decision making and authority to speak. For the second meeting, name plates were requested and also to give preferential visibility/seating to primary representatives with alternate positioned behind, and a request to only have 1 alternate attending. Many felt that despite the issues noted in the first meeting, the setup for the second meeting had not been optimal, as it prevented exchanges (between member reps) and also as most of discussion was not decisional, input from alternates to meeting was useful and welcomed. Furthermore it was noted that much of the PB's work was intercessional, and would broadly benefit from contributions from alternates; therefore excluding them from discussions at the meeting would not be very encouraging.

COSPAR noted that by the time of this discussion, the Programme Board was no longer at quorum, therefore could not take decisions on these matters at the meeting. M. Reichardt (OGC) suggested that amendments to ToR could address the issues and proposed to come with a proposal which could be consulted by all members with a view to take a decision later.

a)   Next Steps

Subgroup led by M. Reichardt (OGC) and M. Sideris (IUGG) established to formulate modifications to PB ToR / creation of additional protocols to address the issues that had arisen, and also next steps for PB for period 2017 - 2019, covering:

- 2017-2019 Programme Board nomination process (including need to reduce size, encourage turnover).
- 2017-2019 Programme Board co-chair nomination process.
- Principal/alternate Board representation.

b)   Conclusions

- For the July Executive Committee meeting:
  - Secretariat will provide draft 0 of the 2017-2019 Work Programme, based on proposal summaries received.
  - Programme Board co-chairs to provide progress report; process milestones, and status update from proposal review panels.

APPENDIX A

Draft Timeline for Reviewing Initiative and Flagship Proposals

Activity	Deadline
Additional, and voluntary revisions of, Proposals Received	27 May
Reviews begin	1 June
Interim report from lead reviewer to co-chairs and SEC on progress	17 June
Reviews end, final individual reports due	30 June
Reviews are consolidated by lead reviewer	7 July
Feedback sent to Initiatives	8 July
Revised packages due from Initiative	31 July
Report from lead reviewer to co-chairs and SEC on progress	10 August
Second review of packages; final recommendations prepared	15 August
Final report sent to PB	15 August
PB review and concurrence/acceptance/xx	7-8 September

Other points –

- Each proposal gets 3 reviews (each PB member will review a small number of proposals)
- At a minimum, the existing criteria (in the Reference Document and in the proposal template) will be evaluated.
- The goal is to include every proposal in some form, either as a full Initiative or Flagship, or as a CA.
- An easy/common template for capturing comments/constructive feedback to enhance the effectiveness of the proposal overall
- Outcome of review should be (with justification for each decision)
  - Accepted as is
  - Accepted after additional info has been provided, or small deficiencies pointed out in the first review have been addressed in the revised proposal
  - Not accepted

Still to be Done

- Providing guidance to reviewers (written set of review guidelines)
- Develop the template (one example already in hand)

Guidance from PB

- Develop any necessary balance criteria (not even clear they are needed….)

APPENDIX B

Final Participant List

Member	Last Name	First Name	Email
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