Report of the 2016 Programme Board to GEO-XIII

This Document is submitted to the GEO-XIII Plenary for information.
1 THE GEO PROGRAMME BOARD

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.

2 ACTIVITIES IN 2016

The GEO 2016 Programme Board (PB) met 3 times in 2016 (2-3 February, 5-6 May, and 7-8 September). Each of the meetings established a number of sub-groups that looked at issues such as prioritization of Foundational Tasks; reviewing candidate GEO Initiative proposals and implementation plans for inclusion in the GEO 2017-2019 Work Programme (GWP); reviewing candidate GEO Initiatives seeking Flagship status for inclusion in the GWP; reviewing the status of Science & Technology (S&T) across the 2016 GWP in reference to the S&T Roadmap developed by the former GEO Science and Technology Committee (STC); defining PB interactions with the GEO Community Activities; Monitoring and Evaluation of the GWP; revising the Programme Board Terms of Reference; compiling “lessons learned” to deliver to the 2017-2019 Programme Board; and mapping activities of the GWP to support for the United Nations 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs).

With respect to the candidate Initiatives and Flagships, the evaluation process that was put in place involved review panels of three PB members who provided an initial assessment of each of the Initiative/Flagships implementation plans to the authors during the summer months. In most cases, requests were made for clarification or supplemental information, which the authors were invited to respond to. Final decisions regarding inclusion in the 2017-2019 GWP were made at the September PB meeting.

As part of its regular duties, the Programme Board co-chairs delivered progress reports to the Executive Committee at both the 36th (March) and 37th (July) meetings.

The 2016 PB will meet one final time on 7 November to review lessons learned for delivery to the 2017-2019 PB (Initiative and Flagship review process in particular); refine interactions with the GEO

Community Activities; consider optimal PB-Flagship advisory board interactions; and review the GEOSS “state of play” concept paper.

3 THE GEO 2017-2019 WORK PROGRAMME

The GEO Work Programme: 2

- is proposed by the GEO Secretariat to the GEO Programme Board, based on input from GEO Members, Participating Organizations and the greater GEO community;
- constitutes the primary coordination and planning instrument to assist GEO with the selection and prioritization of its activities;
- defines the GEO Foundational Tasks as well as describes the plans of GEO Flagships and GEO Initiatives according to their applicable planning documents, and of GEO Community Activities according to the best knowledge of the GEO Secretariat;
- strives to optimally pursue the achievement of the Strategic Objectives through the implementation of GEO’s Core Functions, within the constraints of identified and committed resources; and
- aligns with the priorities of GEO Members and Participating Organizations and identify resource commitments by GEO Members, Participating Organizations, and other third parties, be they actual financial contributions or in-kind.

3.1 GEO Community Activities

The Mexico City Declaration acknowledges “GEO’s important convening power to … maximize the value of Earth observations for downstream users and decision makers.” As a reflection of this convening power, the 2017-2019 GWP contains 30 Community Activities (CAs) that span GEO’s Societal Benefit Areas (SBAs), representing the collaboration of 35 GEO Members and 24 Participating Organizations, with a total indicated annual financial contribution of over US$43 million (not including in-kind).

3.2 GEO Initiatives

The Mexico City Declaration affirms that “GEO and its Earth observations and information will support the implementation of, inter alia, the 2030 Global Goals for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015-2030, the United Nations System of Environmental and Economic Accounts, and the United Nations Framework Convention on Climate Change.” The 2017-2019 GWP contains 22 Initiatives, representing the collaboration of 56 GEO Members and 37 Participating Organizations (including 7 UN agencies), with a total indicated annual financial contributions of over US$ 94 million (not including in-kind). Several of the Initiatives directly target the use of Earth observations in support of the various agendas and frameworks referred to in the Ministerial declaration.

3.3 GEO Flagships

The Mexico City Declaration further notes that “the returns from open access to Earth observation data from examples of applications have resulted in measurable benefits. These benefits have been realized in a wide range of areas…” The 2017-2019 GWP contains 4 Flagships, representing the collaboration of 24 GEO Members and 10 Participating Organizations, with a total indicated annual contributions of US$ 40 million (not including in-kind). These Flagships are already providing a number of services to inform decision making, including:

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2 GEO Strategic Plan 2016-2025: Implementing GEOSS
3.3.1 **GEO Biodiversity Network (GEO BON)**

- Development of and coordinating of national, regional and thematic Biodiversity Observation Networks (BONs);
- Delivery of Essential Biodiversity Variables (EBVs); and
- Delivery of BON in a Box for harmonizing local, national, regional and global biodiversity observation methods, and capacity building.

3.3.2 **GEO Global Agricultural Monitoring (GEOGLAM)**

- Monthly delivery of the Crop Monitor for AMIS (since September 2013);
- Monthly delivery of the Crop Monitor for Early Warning (since February 2016);
- Development of the Asia-RiCE programme, for rice monitoring in Asia (data set requirements, SAR/Optical rice crop production information and monthly delivery of rice crop outlook);
- Development of JECAM activities (Minimum data set requirements, Cross-site SAR experiment);
- Development of the Rangeland and Pasture Productivity (RAPP) initiative (including the RAPP Map [http://map.geo-rapp.org/](http://map.geo-rapp.org/), the Vegetation Cover Anomaly monthly distributed on [www.geo-rapp.org](http://www.geo-rapp.org), and discussions around EO data requirements and modelling activities); and
- Development and on-line publishing of the new GEOGLAM website ([www.geoglam.org](http://www.geoglam.org)).

3.3.3 **Global Forest Observation Initiative (GFOI)**

- Delivery of core data streams and products;
- Services tools for data acquisition planning, storage, and processing to support country needs;
- Production of Methods and Guidance Documentation (in several languages);
- REDDcompass web based application for developing Forest monitoring and MRV systems; and
- ‘Training the Trainer’ Workshop series.

3.3.4 **Global Observation System for Mercury (GOS4M)**

- Web services for reporting information, as for example atmospheric concentrations in different World regions, mercury’ deposition/release in different environmental compartments (e.g. soil, oceans), mercury in biota; and
- Tools developed to include stakeholder participation in information discovery (e.g. to help decide how much and which fish to consume).

3.4 **GEO Foundational Tasks**

The 37th Executive Committee meeting in July confirmed the need for a prioritization of Foundational Tasks undertaken by the Programme Board for WP 2017 - 2019. At its meeting in September the Programme Board reached consensus about which Foundational Tasks had greatest priority. A Programme Board sub-group subsequently discussed a number of aspects and came forwards with more detailed recommendations which were circulated to the boarder Programme Board for comments and approval.

In the analysis of Foundational Tasks during the Transitional 2016 GWP, the Programme Board discerned two broad types:

1. Foundational tasks where there was smaller Trust Fund resourcing (The GEO Secretariat provides support) counterbalanced by much larger community input and leadership. These were categorized as “GEO Community led”.
2. Foundational tasks with substantial resources from the GEO Trust Fund and where the GEO Secretariat has a leading role to coordinate implementation. These were categorized as “GEO Secretariat led”.

Some Foundational Tasks from the Transitional 2016 GWP were deemed to be either of lesser priority, or capable of being realized through other Implementation Mechanisms\(^3\).

4 \hspace{1em} \textbf{LOOKING AHEAD}

The 2017-2019 GWP identifies several linkages that already exist between Initiatives and Flagships (and CAs in some instances). As GEO implements the activities in this Work Programme over the next 3 years, it will be essential for the 2017-2019 Programme Board to continue to identify synergies that can be leveraged (such as between \textit{Oceans and Society: Blue Planet Initiative} and the Marine BON portion of the \textit{GEO BON Flagship}).

Additionally, the Board will need to highlight instances where outputs from one initiative might become inputs to another (such as the \textit{Copernicus Atmospheric Monitoring Service [CAMS]} CA and the \textit{GEO Vision for Energy [GEO VENER] Initiative}), thereby creating and fostering dependencies, and promoting the exchange of best practice.

Finally, the 2017-2019 Programme Board will need to not only continue the important work of aligning the scope of GEO Initiatives and Flagships with the Strategic Objectives of GEO and the resources committed by the GEO Plenary. Through these activities, the Programme Board will strive to make connections across the Work Programme more explicit and steer the activities of GEO towards an increasingly integrated and coherent whole that is much greater than the sum of its parts.

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\(^3\) For a summary of the mapping of the Foundational Tasks from the 2016 to 2017-2019 GWPs, please refer to the ‘Outcomes Session 2’ PowerPoint file available at the Programme Board webpage: http://earthobservations.org/geo_pb.php