

## **Supporting Sustainable Development Goals – an Analysis of the GEO 2017-2019 Work Programme**

*This Document is submitted to the Executive Committee for information.*

### **DRAFT TEXT FOR INCLUSION IN THE DRAFT REPORT OF THE 38<sup>TH</sup> EXECUTIVE COMMITTEE MEETING**

The Executive Committee appreciates the work of the Programme Board and endorses its proposed roadmap for continuing the assessment of GEO's support for major policy initiatives.



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### **1 INTRODUCTION**

The GEOSS “State-of-play” subgroup, established at the 37<sup>th</sup> Executive Committee meeting, convened a teleconference on 26 August 2016. In the course of the teleconference, the subgroup made the following observation and request of the Programme Board:

- The Programme Board will have the responsibility to assess the viability of the GEO Work Programme to address major issues and drivers, and provide to the Executive Committee scenarios and alternatives for ensuring that GEO’s Work Programme is appropriately positioned to do so. Scenarios may include recommended new Initiatives and/or plans to boost relevant candidate Flagships and Initiatives, e.g. through recommended resource mobilization actions;
- It was agreed to test the suggested approach in a two-stage process, using the Sustainable Development Goals (SDGs) of the United Nations (UN) 2030 Agenda for Sustainable Development as the framework for this pilot assessment: first a rapid assessment of the GEO Work Programme relative to a set of drivers to be performed by the 2016 Programme Board, followed by a more structured in-depth assessment that will be developed by the 2017 Programme Board;
- For 2016, the Programme Board’s assessment of GEO’s Work Programme vis-à-vis the SDG requirements for Earth observation information will give us insights into how GEO is positioned to deliver towards those global aims. Results of this preliminary analysis should be included in the presentation of the Programme Board to GEO-XIII Plenary and used as a means for engaging GEO Members on both the Executive Committee and in Plenary. The aim will be to provide a basis for a substantive discussion about how GEO may approach the implementation of the GEO Strategic Plan and the Mexico City Ministerial Declaration commitments.

### **2 MAPPING THE 2017-2019 WORK PROGRAMME TO THE SDGS**

At its 3<sup>rd</sup> meeting on 7-8 September, the Programme Board (PB) created an ‘SDG subgroup’ to implement the initial step in a request from the Executive Committee (see Appendix A for membership). Following a teleconference held in October, the SDG subgroup prepared a condensed table featuring all 17 SDGs, along with their targets and related indicators, which was sent to the leads and points of contacts for all GEO Community Activities, Initiatives and Flagships with the request to identify, where possible, to which of the SDG targets (and associated indicators, where applicable) their particular activity could be viewed as making a contribution. Simultaneously, the Programme Board membership was also queried for their views since the Board had recently performed a review

of all candidate Initiative and Flagship proposals for the 2017-2019 Work Programme. The results of this survey were then placed in a matrix, which is presented in Appendix B.

### **3 COMMENTS FROM THE PROGRAMME BOARD**

- The PB notes that, in 2015 when the UN General Assembly (UNGA) agreed on the landmark resolution “*Transforming our World: the 2030 Agenda for Sustainable Development*”, they included Earth observations and geospatial information in their follow-up and review framework. Specifically paragraph 77 of the resolution states, “We will promote transparent accountable scaling up of appropriate public-private cooperation to exploit the contribution to be made by a range of data including Earth observation and geospatial information...” The 2015 GEO Mexico City Ministerial Declaration took up the challenge of this UNGA resolution, and this present assessment will set the stage to identify what GEO is doing currently in response, and also look to the future to identify gaps and challenges that GEO may be able to fill;
- This particular exercise with respect to the SDGs was selected by the Executive Committee as a first example of an analysis of a major policy initiative that could be more fully supported through GEO, strengthening and emphasizing GEO’s relevance as it interacts more closely with major user groups. Due to their comprehensive nature, the SDGs are a main driver of policy-related environmental information at a global level for the next decade. The information demand is both in response to the need for data to populate indicators to track progress, and also to support achieving the SDGs themselves. Other major policy initiatives could equally apply, as mentioned in the *GEO Strategic Plan 2016-2025: Implementing GEOSS* and Mexico City Ministerial Declaration;
- It should be noted that this exercise is separate from, but complementary to, the GEO Foundational Task *User Needs and Gap Analysis* of the Work Programme;
- It should also be noted that the approach could be implemented using either the Work Programme or the SDGs as the starting point;
- In order to fully deliver on the task handed to the PB, the PB suggests the following roadmap with several components:
  - I. A short term analysis based on existing Community Activities, Initiatives and Flagships, identifying where and how each activity may contribute to the overall SDGs. This process will be led by the tasks and the PB, with results presented to both the Executive Committee and Plenary as an example of how GEO strives to better understand which goals and indicators are likely to be addressed by ongoing WP activities (i.e. supports policy), while at the same time paints the gap space. In this manner, a different methodology is employed compared to the past, taking a top-down approach driven by policy needs, in contrast to the bottom-up assembly of tasks previously comprising the GEO Work Programme. The 2017-2019 Work Programme has made some strides in ensuring consistency and coherence among tasks, but they remain essentially defined from the bottom-up (although the tasks, of course, consider the relevance of policy in the context of decision-making in their definition);
  - II. A longer term analysis, employing a more direct approach that addresses all targets and indicators systematically, should identify where Earth observations and geospatial data can contribute to achieving the SDGs, and in some cases may be essential. This analysis would then be compared with the GEO Work Programme to produce both a list of relevant tasks, and also identify where no GEO Community Activity, Initiative or Flagship exists at present but where GEO may contribute to supporting the SDGs, and the 2030 Agenda for Sustainable Development in general, in a substantive way.

The end result would be an action plan where additional tasks are identified and defined as necessary. This would be a major effort, but may be useful in the future for designing a top-down GEO in relation to the SDGs.

- III. The GEO Initiative *Earth Observations in Service of the 2030 Agenda For Sustainable Development* (formerly “GI-18”) forms a complementary tool in this analysis as it explores methodologies and processes needed to be able to support the SDGs via GEO at the national level, taking into account the internal processes of the UN, and illustrating a modus operandi through addressing a selection of targets.

#### **4 CONCLUSION**

As a result of this initial mapping exercise, the Programme Board is encouraged to find that GEO adds value to the UN 2030 Agenda for Sustainable Development as several activities of the 2017-2019 Work Programme can be viewed as contributing to the realization of the SDGs. The decision now before Plenary is to what extent support for major policy initiatives should drive prioritization of subsequent GEO Work Programmes.

**ANNEX A****PROGRAMME BOARD SDG SUBGROUP MEMBERS:**

- Balzter, Heiko (UK)
- Bourassa , Marie-Josée (Canada)
- Briggs, Stephen (CEOS)
- Fontaine, Kathy (ESIP)
- Haigh, Tim (EEA)
- Khalsa, Siri-Jodha (IEEE)
- Matuszak, John (USA)
- Navarro, Laetitia (GBIF)
- Ranchin, Thierry (France)
- Reichardt , Mark (OGC)

**EXPERT:**

- Friedl, Lawrence (USA; lead for GEO Initiative *Earth Observations in Service of the 2030 Agenda for Sustainable Development*)

**ANNEX B****RESULTS OF GEO WORK PROGRAMME TO SDG MAPPING EXERCISE**

Note that results against a light orange background indicate information received directly from Leads/Points of Contact of a given Community Activity, Initiative or Flagship, or Programme Board members' familiarity with the proposals based on their reviews. Responses varied from areas of potential contribution to specific targets that are being supported. Depicted in light blue are potential contributions based on an analysis of the Work Programme by the GEO Secretariat.

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
<b>COMMUNITY ACTIVITIES</b>																	
ACCESS TO CLIMATE DATA IN GEOSS																	
AFRICAN GEOCHEMICAL BASELINES																	
AIRNOW INTERNATIONAL: EXPANDING NETWORKS AND INTEGRATING METHODS FOR AIR																	
AQUAWATCH						6.3, 6.6, 6.b								14.1, 14.2, 14.3	15.1		
CHINESE TSUNAMI MITIGATION SYSTEM																	
COPERNICUS ATMOSPHERIC MONITORING SERVICE (CAMS)			3.9.1				7.2				11.6.2		13.2.1				
COPERNICUS CLIMATE CHANGE SERVICE (C3S)						6.4	7.a, 7.b				11.1, 11.2		13.1-3				
DATA ANALYSIS AND INTEGRATION SYSTEM (DIAS)																	
DIGITAL GEOMUSEUM																	







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<b>INITIATIVES</b>																	
AFRIGEOSS: REINFORCING REGIONAL AFRICAN ENGAGEMENT																	
AMERIGEOSS																	
ASIA-OCEANIA GEOSS (AOGEOSS)																	
CLIMATE CHANGE IMPACT OBSERVATION ON AFRICA'S COASTAL ZONES (GEO-CCIOACZ)																	
DATA ACCESS FOR RISK MANAGEMENT (GEO-DARMA)																	
EARTH OBSERVATIONS FOR ECOSYSTEM ACCOUNTING (EO4EA)		2.4	3.9			6.5, 6.6					11.b	12.2		14.2	15.1-5, 15.9	16.6, 16.10	
EARTH OBSERVATIONS IN SERVICE OF THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT																	
GEO CARBON AND GREENHOUSE GAS INITIATIVE																	
GEO COLD REGIONS INITIATIVE (GEO CRI)	1.5	2.1-4	3.2, 3.3, 3.9	4.a		6.1-6	7.1-3, 7.a, 7.b	9.5, 9.a		11.1-7, 11.a-c	12.2, 12.4	13.1, 13.2, 13.b	14.1-5, 7	15.1-5, 15.9		17.18, 17.19	
GEOHAZARD SUPERSITES AND NATURAL LABORATORIES (GSNL)	1.5.1, 1.5.2									11.5.1, 11.5.2							
GEO GLOBAL ECOSYSTEM INITIATIVE (GEO ECO)																	
GEO GLOBAL NETWORK FOR OBSERVATION AND INFORMATION IN MOUNTAIN ENVIRONMENTS (GEO-																	
GEO GLOBAL WATER SECURITY (GEOGLOWS)																	

GEO HUMAN PLANET INITIATIVE: SPATIAL MODELING OF IMPACT, EXPOSURE AND ACCESS TO																					
GEOS-EVOLVE																					
GEO VISION FOR ENERGY (GEO VENER)																					
GEO WETLANDS INITIATIVE																					
GLOBAL DROUGHT INFORMATION SYSTEM GLOBAL INITIATIVE (GDIS)																					
GLOBAL OBSERVATION SYSTEM FOR PERSISTENT ORGANIC POLLUTANTS (GOS4POPS)																					
GLOBAL URBAN OBSERVATION AND INFORMATION																					
GLOBAL WILDFIRE INFORMATION SYSTEM (GWIS)																					
OCEANS AND SOCIETY: BLUE PLANET																					
<b>FLAGSHIPS</b>																					
GEO BIODIVERSITY OBSERVATION NETWORK (GEO BON)																					
GEO GLOBAL AGRICULTURAL MONITORING (GEOGLAM)																					
GLOBAL FOREST OBSERVATION INITIATIVE (GFOI)																					
GLOBAL OBSERVATION SYSTEM FOR MERCURY (GOS4M)																					