

Draft Engagement Plan for 2020

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

1 INTRODUCTION

The GEO Executive Committee established engagement priorities relating to three international policy areas, namely the United Nations 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction and the Paris Agreement. Through a mix of leadership from policy coordinators and participants of GEO Work Programme activities, progress has been made to develop an understanding of how, where and for whom Earth observations can support the engagement priorities. The ongoing goal now for each priority is to continue working with the relevant UN bodies, and to make best use of scientific and technological developments available through the GEO Work Programme activities to guide the global GEO community in the use of Earth observations for each policy area.

At each GEO Plenary since GEO-XII in Mexico (2015), there have been side events and plenary talks relating to the engagement priorities, topics for GEO members to consider and actions to take forward the role of Earth observations in supporting international and national policy decisions. Some success stories relate to the use of Earth observations language in documents, for example, relating to the Sendai Framework – this includes the Data Readiness Review in 2018 and the Global Assessment Report (GAR) on Disaster Risk Reduction in 2019. The most recent meeting was the GEO Week 2019 held in Canberra, Australia, which included the GEO Plenary and the Canberra Ministerial Summit. During this week there were a number of sessions relating to the engagement priorities with a set of outcomes.

In addition to working with the UN agencies responsible for each of the policy areas, other relationships have been taken on to develop awareness and understanding of the work of GEO. For example, with UN Environment the GEO Secretariat Director is co-chair of a working group on Big Data and Frontier Technologies under the auspices of the UN Science Policy Business Forum.

2 UN 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Based on the Lead Co-Chair's Goals and Objectives for 2020 which include GEO supporting its Members using Earth observations to respond to and monitor progress toward the Sustainable Development Goals (See Annex 2, Objective 1.1), and building on the 2019 Goals and Objectives the focus for the Sustainable Development Goals is as follows.

Key partner	Purpose of engagement	Event	Remarks
United Nations Statistics Division and UN-GGIM	Continue work on the development of SDG indicators using Earth observations and develop integration of EO with national statistical information systems.	UN Statistical Commission (3-6 March, NYC) 6 th Expert Meeting of the Working Group on Geospatial Information (9-11 March, Mexico City)	Work closely with UN custodian agencies and IAEG-SDG member countries for different SDGs.
		UN-GGIM 11 th Plenary session (3-7 August, NYC, USA)	Annual EO4SDG meeting during same week.
	Highlight the work of EO4SDG on data and tools.	World Data Forum (22-24 October, Bern, Switzerland)	Work with GEO members to showcase work on SDGs.
UN-Habitat	Develop work on SDG11 Collaborate with others from GEO Work Programme.	World Urban Forum (8-13 February, UAE)	EO4SDG supporting two sessions with GEO Secretariat.
	Support development of GEO SDG Toolkit on SDG 11, Sustainable Cities and Communities.	Meeting on the margins of WUF.	Develop design process for SDG 11 toolkit (EO4SDG, HPI, GUOI, UN Habitat, among others, to participate).
CEOS Capacity Development Working Group (WG CapD)	Set up a Space Capacity Development Advisory Board (SCDAB) "necessitates leadership of the capacity development networks of UNOOSA, WMO, GEO, CGMS, and CEOS to nominate managerial and technical experts as points of contact who have extensive experience in capacity development programs for different regions". Define focus SDGs to drive piloting of SCDAB.	CEOS WGCapD Meeting (March 9-13, Mountain View, California)	EO4SDG is working with CEOS WG CapD, CEOS SDG Ad Hoc Team, partners (including WMO, UNOOSA).
CEOS SDG Ad Hoc Team	Assess satellite data requirements for production of SDG indicators. Review EO-enabling infrastructures available in CEOS agencies to enable the uptake of satellite EO by SDG stakeholders.	CEOS SIT Meeting 2020 (March 21-23, Hobart, Australia)	EO4SDG participating in CEOS SDG AHT side event, SIT meeting.

Key partner	Purpose of engagement	Event	Remarks
Geo4SDGs	Geo+4IR: Creating New Frontiers for Sustainable Development.	Geospatial World Forum (GWF) 2020 (April 7-9, Amsterdam)	EO4SDG supporting two sessions with UN SDSN and partners.
AmeriGEO	<p>Extend GEO SDG toolkits in support of regional SDG processes and priorities.</p> <p>Collect stories, use cases and testimonials at national/subnational and regional level.</p> <p>Demonstrate applicability of EO for SDG targets/ indicators and ILAC indicators.</p>	AmeriGEO Week 2020 (September 7-11, Mexico)	<p>EO4SDG to organize SDG session.</p> <p>Work with AmeriGEO and regional partners (UN Environment LAC office) to extend GEO SDG toolkits in support of regional SDG processes and priorities.</p>
UN Environment Programme	<p>Supporting EO data integration for SDG 6.6.1 app platform including training material/ tutorial.</p> <p>Working with UNEP LAC Office in scoping SDG 6-related country pilots in support of environmental policy and decision making.</p>	<p>n.a.</p> <p>AmeriGEO Week 2020 (September 7-11, Mexico)</p>	
GFOI	Scope out one or more pilots in Latin America on institutional arrangements for the development of data for different applications including REDD+, NDC, and SDG monitoring. This will contribute to GEO SDG Toolkits that EO4SDG is leading.	16th GFOI Regional Workshop in the Americas: “How is REDD+ data use for management, policy, and other reporting mechanisms in Latin America” (January 21-24, Fort Collins, Colorado)	Partners include EO4SDG, USAID, FAO, SilvaCarbon, NASA SERVIR among others

3 PARIS AGREEMENT

Taking into account the Lead Co-Chair's goals and objectives for 2020, in particular the objective (See Annex 2, Objectives 1.3 and 1.5) to increase the contribution of Earth observations to the UNFCCC and IPCC processes, as well as the objective for GEO to be recognized as a partner by United Nations organizations and international Conventions in fulfilling their mandates, the GEO Secretariat proposes the following engagement plan with key partners with regard to the Paris Agreement on climate change engagement priority.

Key partner	Purpose of engagement	Event	Remarks
United Nations Framework Convention on Climate Change (UNFCCC) Secretariat	Obtaining GEO's observer status to the UNFCCC.		GEO Members support and endorsement needed.
	Enhancing GEO's participation in the UNFCCC process.	NAP Expo 2020 (30 March – 3 April, Gaborone – Botswana)	Presentation of GEOGLAM work for National Adaptation Plans, and other flagship initiatives relevant for adaptation.
	Continue work to support UNFCCC and to develop the working relationship, as well as with other stakeholders.	52 nd Subsidiary Bodies session (1-11 June, Bonn – Germany)	Participation in SBSTA - Research and Systematic Observation item.
	Build on engagement at COP25 in Madrid, including topics supported and messages delivered relating to Earth observations and work of GEO.	26 th Conference of the Parties (9-19 November, Glasgow - UK)	Participation in SBSTA - Research and Systematic Observation item, Earth Information Day. Organisation of side events including through the UNFCCC Resilience Hub, and bilateral meetings.
	Outreach and development of supplementary guidance on value of EO within the UNFCCC process.	GEO Climate Workshop (TBD)	In coordination with GEO Climate Working Group (to be established).
	Joining Nairobi Work Programme (NWP) on impacts, vulnerability and adaptation to climate change.	NWP Focal Point Forum – during COP26 (9-19 November, Glasgow - UK)	NWP works in collaboration with partners and experts to advance activities that produce usable knowledge products and catalyse partnerships for collaborative action.
Intergovernmental Panel on Climate Change (IPCC)	Contribution to AR6 review.	52 nd IPCC session (24-28 February, Paris – France)	In coordination with GEO Climate Working Group (to be established).
		53 rd IPCC session (6-10 October, TBD)	
	Development of GEO response to IPCC Special Reports identified gaps in EO.		
World Meteorological Organization (WMO)	Development of joint WMO-GEO action plan.		In collaboration with WMO.

Key partner	Purpose of engagement	Event	Remarks
	Enhancing GEO's participation in WMO processes.	WMO Data Conference (expected October-November)	
Global Framework for Climate Services (GFCS)	Participating in the GCFS Partner Advisory Committee (PAC).	PAC Meeting (expected October-November)	
	Participating in drafting of State of Climate Services reports mandated by UNFCCC COP24.		Focus on water-related GEO Work Programme activities that produce climate services.
	Linking GFCS with cloud-based sustainability applications using EO.		GFCS should highlight next call for opportunities.
Global Climate Observing System (GCOS)	Enhancing GEO's participation in GCOS processes.		Focus on terrestrial observations.
	Supporting action for countries (GCOS long-range objectives) through existing GEO WP activities.		
European Space Agency (ESA)	Furthering cooperation with ESA Climate Change Initiative (CCI).	Bilateral meetings	
		ESA CCI Colocation Meeting (24-26 March, Oxford – UK)	
European Commission	Furthering cooperation with EuroGEO.	EuroGEO Workshop 2020 (8-10 June, Paris – France)	Focus on climate change-relevant GEO Work Programme activities (TBD).
Global Forest Observations Initiative (GFOI)	Furthering cooperation with GFOI Office and supporting GFOI in linking with UNFCCC process.	GFOI Plenary (10-13 March, Rome - Italy)	Organization of GEO-led parallel session.
United Nations Environment Programme (UNEP)	Supporting the development of Global Environmental Outlook – GEO7.		GEO was mentioned for the first time in the Global Environmental Outlook 6 – GEO6
CEOS/CGMS Joint Climate Working Group (ClimateWG)	Furthering cooperation with CEOS/CGMS Climate WG.		GEO's participation in ClimateWG teleconferences.
		GEO-CEOS bilateral meeting (3-4 February, Geneva – Switzerland)	Focus on: Discussion of areas where GEO would appreciate support from CEOS; Support for climate adaptation, incl. coordination with the "Space Climate Observatory"; Climate monitoring – ensuring strong ongoing GEO, CEOS, CGMS and GCOS linkages

Key partner	Purpose of engagement	Event	Remarks
Global Centre for Adaptation (GCA)	Liaising with GCA to promote use of EO for adaptation.	Bilateral meetings	
		GCA Climate Action Summit week (19-23 October, Rotterdam - The Netherlands)	Organisation of side-event, focus on food security and agriculture – GEOGLAM.
		GEO Plenary (2-6 November 2020, Port Elizabeth – South Africa)	Invite GCA as keynote speaker for GEO Plenary.
			Focus on GEOGLOWS, GEOGLAM, GEO BLUE PLANET, GFOI, GEO LDN
Green Climate Fund (GCF)	Engaging with GCF and GEO Members to link Fund's activities to GEO WP activities.		Focus on GEOGLOWS, GEOGLAM, GEO BLUE PLANET, GFOI, GEO LDN.
Global Environment Facility (GEF)	Engaging with GEF and GEO Members to link Fund's activities to GEO WP activities.	Expert Forum on Climate change-related statistics (TBD)	
United Nations Economic Commission for Europe (UNECE)	Contribution to UNECE Set of Core Climate Change-Related Indicators report.		

4 SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION

In recognition of the Lead Co-chairs' Goals and Objectives for 2020 which include GEO supporting its Members to use Earth observations in responding to and monitoring progress of the Sendai Framework (See Annex 2, Objective 1.2), and building on the 2019 Goals and Objectives the focus for the Sendai Engagement Priority is two-fold.

The first being to maintain and strengthen the position that GEO has development with UNDRR and the second to work more closely with GEO Members, both individually and through the Regional GEO frameworks. With this in mind and based on the discussions and outcomes from the GEO Plenary Session Action on Disaster Risk Reduction Session, the following key partners and relevant events have been identified.

We are also seeking an exchange of letters between UNDRR and GEO to formalize the relationship, noting and drawing on activities such as GEO's membership of the GAR Advisory Board, GEO Members involvement in GRAF, and understanding/awareness for GEO as a body representing the interests of Members. This can be one of the outcomes following the Special Session on Sendai Framework at the 16th Programme Board.

Key partner	Purpose of engagement	Event	Remarks
United Nations Office for Disaster Risk Reduction	Supporting the Development of the Global Assessment Report.	GAR Advisory Boards meet virtually and in person.	Specifically, GEO Secretariat Director supported by Engagement Priority Coordinator.

Key partner	Purpose of engagement	Event	Remarks
(UNDRR)	Supporting the development of the Global Risk Assessment Framework through engagement and involvement of GEO Members.	Possible invitations to meetings in Geneva.	Multiple touch points including GEO Members participating in their own right, GEO Secretariat have been providing advice and guidance.
	Regional Platforms for Disaster Risk Reduction.	Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean (8-10 July, Jamaica)	
United Nations Office for Outer Space Affairs (UNOOSA)/UN-SPIDER	UNOOSA offer training and in-country support on the use of Earth observations. Several GEO Members and Regional GEOs are actively engaged with UNOOSA		Support to GEO Members to be able to link the work of GEO and UN-SPIDER, including the provision of data and services through to the GEO Work Programme, specifically linked to Capacity Development.
Global Facility for Disaster Reduction and Recovery (GFDRR), World Bank	Outreach/Advocacy into Risk Community in the value of open and accessible Earth observations.	Understanding Risk Central America	AmeriGEO Disasters Initiative has been working to develop a GEO presence.
		Understanding Risk 2020 (20-22 May, Singapore)	A side event proposal has been submitted (awaiting response). Opportunity to work with GEO community and to promote specific activities.
Committee on Earth Observation Satellites (CEOS)	Work Group Disasters – representing GEO in the CEOS discussions.	WGDisasters 13 (9-13 March, California, USA)	Monthly teleconferences and biannual face-to-face meetings.
United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)	Outreach/Advocacy to UN Members on the value of open and accessible Earth observations.	Committee of Expert Meeting (3-7 August, USA)	
		Sixth High Level Forum (20-22 April, UK)	
	Currently a member of the Working Group on Geospatial Information and Services for Disasters.		Join WG-Disasters calls.
International Charter Space and Major Disasters	Clarify the relationship between the two organisations specifically relating to the availability and use of data for GEO Work Programme activities.		They are running a series of monthly features to highlight 20 years of the Charter, we should publish something on GEO's contribution to enable access for GEO members.
Regional GEO DRR Groups	Support the Regional Initiatives GEO activities for disaster risk reduction.	Specific requirements for each Regional GEO.	I am not sure how much Europe is focussing in this area, more Asia and LatAm, some in Africa.

Key partner	Purpose of engagement	Event	Remarks
Other Expert Stakeholder opportunities	2020 Asia-Pacific Ministerial Conference on Disaster Risk Reduction.	(23-26 June, Australia)	Information has not been made public yet, possibly support AOGEO.
	2020 Asia Pacific Science and Technology Conference for Disaster Risk Reduction.	16-17 March, Kuala Lumpur, Malaysia	

5 NEW URBAN AGENDA

In 2019 as part of South Africa’s goals as lead co-chair for the GEO Executive Committee, the GEO Secretariat started to build on early engagement around Earth observations for urban resilience and sustainability. This was done in collaboration with participants working on urban related activities in the GEO Work Programme, including with UN-Habitat the custodian agency for SDG11 and the UN agency leading the New Urban Agenda.

UN-Habitat and the GEO Secretariat have agreed to exchange letters as a means to formalize the working relationship and there is a Programme Board Urban Resilience Task Force. The letters will outline key priorities for each organisation and their stakeholders. The UN-Habitat letter is expected to outline actions around data for 10k cities, SDGs (notably SDG11) and the New Urban Agenda.

The GEO Secretariat has submitted a successful application for a side event during the 10th World Urban Forum, to be held in Abu Dhabi 6-13 February 2020. This side event will involve leaders from HPI, GUOI and EO4SDG representatives, as well as Mexico. There is a short introductory paper on Earth observations and activities in the urban arena being worked on by AidData and the GEO Secretariat (planned for publication in February 2020).

Other work underway in this domain relates to the 2030 Agenda:

- Linking New Urban Agenda indicators to the relevant SDG indicators (not only those under SDG 11);
- An SDG 11 synthesis report has been prepared, which will serve as a baseline against which future progress may be compared;
- A crosswalk between urban issues and climate/DRR.

There is also a climate unit in UN-Habitat with work being done with UNDRR and UN Environment, but it is less clear what is happening currently and if UNFCCC is also involved.

Regarding the New Urban Agenda, there are several opportunities for GEO engagement:

- UN-Habitat is preparing guidelines for member states to report on progress; GEO Secretariat is looking to include language in these guidelines on Earth observations;
- The UN-Habitat reporting platform will be based on the guidelines and will include opportunities for input from non-governmental/civil society organizations;
- A progress report is issued every 4 years, with the next one to be published in 2022.

6 COMMERCIAL SECTOR

There are three main activities relating to commercial sector engagement.

1. These include organisations active in the GEO work programme, notably new Associates of which there are now 15.

2. In September 2019 an open call was made inviting proposals from companies that provide cloud-based geospatial processing platforms for development of applications using Earth observations. Responses were received from Asia, Europe and North America, with an initial offer of \$3m USD made available for Google Earth Engine licenses. At the same time the initial programme with Amazon Web Services resulted in 21 projects from 17 countries, which are now up and running for a 3-year period.
3. In November 2019 at the GEO Week in Canberra, Australia there was an Industry Track which took place at the same time as the GEO Plenary. This involved several days of activities, including hands-on exercises and talks, all relating to Earth observations and the broader theme of working in the digital economy. The goal is to continue this Industry Track again in Port Elizabeth at GEO Week 2020.

There is a broader goal to work with small and medium sized enterprises (SMEs) throughout the GEO community, but this work has still to be determined and developed.

7 RESOURCE MOBILISATION

In 2019, it was agreed that more focus should be given to supporting resource mobilisation efforts of the GEO work programme to help raise ambitions and supporting global initiatives in line with the mandate of GEO. A number of initial activities were chosen based on their success in delivering operational services and due to the possible, scalability of solutions under development. The first two activities chosen to ‘test the water’ were GEOGLAM and GEOGLOWS and some work has been done to refine their messaging and outreach accordingly.

One exemplar of a GEO work programme activity that successfully raised significant funding for an operational service is Digital Earth Africa. \$18m USD was raised in 2019 and another, potential \$18m is lined up for 2020 (for a period of 5-6 years). The GEO Secretariat has been working with the GEOGLAM and GEOGLOWS teams to consider the resource mobilisation requirements and the levels of funding required to make a significant difference in the possible scope of each programme. The National Oceanic and Atmospheric Administration (NOAA) in the USA has also been supporting this activity through a remote secondee to the GEO Secretariat.

Discussions are also underway with third parties to consider possible frameworks and approaches for tackling resource mobilisation to be able to help as many activities as possible in the GEO work programme.

ANNEX 1 – GEO WEEK 2019 OUTCOMES FOR THE GEO ENGAGEMENT PRIORITIES

UN 2030 Agenda from the session *Action on Sustainable Development* resulted in the following summary points for the talks and the interventions:

- Relevant actions on SDGs underway by many GEO Members, e.g. China, Costa Rica, Ecuador, Japan, Mexico, the Netherlands, Norway and USA;
- Ongoing activities in the GWP and by partner organizations, e.g. GEOGLAM, GFOI, GPSDD, SERVIR, UN COPUOS, UNDRR, UNSD, UN-GGIM;
- Focus on increased coordination with Regional GEOs and also with National Statistical Offices (NSOs), and other initiatives such as Data For Now;
- Focus on establishing criteria for ensuring practical guidance for EO-derived information for the international statistical community;
- Support indicator development for the Sustainable Development Goals (SDGs) and increased transparency in follow up and review process;
- Develop new methods to highlight value and practical guidance, through input to GEO SDG Toolkit, and linked to knowledge-based management systems;
- Provide inclusive and quality education for girls and women – support inclusion of STEM in GEO SDG work.

Sendai Framework from the session *Action on Disaster Risk Reduction* resulted in the following summary points for the talks and the interventions:

- Relevant communication of risk information is crucial to action including behavioural change (process not a product);
- Significant progress has been made in the use of open science for disaster risk reduction (such as eShape and the Copernicus Emergency Management Service);
- Growing future engagement of the GWP disaster risk reduction activities, and building on existing activities (such as UN-GGIM, UNOOSA, UNDRR, and the International Charter);
- Coordinated efforts within and among Regional GEOs is beneficial to the sharing of knowledge and experiences;
- For a number of countries DRR is a national priority, linked to the work of GEO and Sendai Framework. We should learn from past experiences and undertake future planning exercises.

Paris Agreement from the session *Action on Climate Change* resulted in the following summary points for the talks and the interventions:

- International cooperation and new sensors are increasingly important for national GHG inventory;
- There should be a focus on supporting developing countries through guidance on the use of Earth observations for climate action, upscaling and/or sharing existing knowledge;
- There should be a focus on increasing the recognition of GEO within the UNFCCC, and engagement with other partners such as the IPCC, the Global Commission on Adaptation and the Space Climate Observatory;
- Additional stakeholders should be included in the GWP development;
- There should be a focus on Earth observations in support of the Arctic, Clean Energy, Cultural Heritage, and Adaptation, particularly for the Agriculture sector;
- The GEO community present at COP25 will include: the UK, Germany, Japan, EC, Kenya, Chile, Spain, and other Members.

ANNEX 2 – LEAD CO-CHAIR GOALS AND OBJECTIVES FOR 2020

Following a practice that has been followed in the Executive Committee since 2017, China, as GEO Lead Co-Chair for 2020, proposed the following Goals and Objectives for 2020. These were adopted by the Executive Committee at their 50th meeting.

Goal 1 : Support the GEO engagement priorities and United Nations organizations through Earth observations and services.
Objective 1.1 – GEO supports its Member governments in using Earth observations in responding to and monitoring progress toward the Sustainable Development Goals
Objective 1.2 – GEO supports its Member governments in using Earth observations in responding to and monitoring progress of the Sendai Framework.
Objective 1.3 – GEO increases the contribution of Earth observations to UNFCCC and IPCC processes.
Objective 1.4 – GEO and UN-Habitat agree on a framework for collaboration related to the New Urban Agenda.
Objective 1.5 – United Nations organizations and international Conventions recognize GEO as a partner in fulfilling their mandates.
Goal 2 : Continue implementation of the Global Earth Observation System of Systems.
Objective 2.1 – Implementation of the GEO Knowledge Hub.
Objective 2.2 – The GEO community has increased access to data sharing and application platforms and analysis-ready data.
Objective 2.3 – Cloud computing services are made available to the GEO community by multiple providers in a GEO-defined framework.
Goal 3 : Engage developing countries in building the Global Earth Observation System of Systems.
Objective 3.1 – Increased engagement of developing countries.
Objective 3.2 – Broader engagement within GEO Members
Objective 3.3 – GEO Work Programme (GWP) activities integrate co-design and capacity development into their implementation plans and governance structures.
Goal 4 : Increase GEO engagement with small, medium and micro-sized commercial organizations (SMMEs), with a focus on Earth observations applications.
Objective 4.1 – Increased engagement of commercial sector organizations, especially SMMEs.
Objective 4.2 – Contributions from commercial sector organizations to GEO are publicly recognized.
Goal 5 : Mobilize resources for GEO.
Objective 5.1 – Increased contributions from Members to the GEO Trust Fund
Objective 5.2 – Resources to support the work of the GEO Secretariat are obtained from other sources.
Objective 5.3 – Resources to support GWP activities are obtained from other sources.