

## **Lead Co-Chair Goals and Objectives for 2021**

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

### **o PREFACE**

The document that follows was presented to the GEO Executive Committee at its 54<sup>th</sup> meeting on 16 March 2021 by the 2021 Lead Co-Chair, Patrick Child of the European Commission. In response to comments from Executive Committee members, a revised version was presented at the second day of the meeting. The revised version was approved by the Executive Committee. The changes from the original version are indicated in Annex A.

### **1 INTRODUCTION**

GEO is the sole global network in the domain of Earth observation with the capacity to connect government institutions, academic institutions, data providers, businesses, engineers, and citizens to create Earth observation based innovative solutions to global challenges at a time of exponential data growth, human health issues and climate change that transcend national and disciplinary boundaries.

In order for it to continue to be the leading global network on Earth observation it is today and to grow further, GEO requires a flexible approach enabling strategic information to be made available on an annual basis for the implementation of GEOSS, supporting the work and activities of the GEO Programme Board and its subgroups, the GEO Secretariat, and the Executive Committee.

It is the primary role of the Lead Co-Chair (LCC) to facilitate the definition and uptake of priorities to ensure a sound implementation of the multiannual work programme, focus Executive Committee agendas on the highest priorities for the upcoming year, and support the efforts of the Secretariat towards these priorities. Progress on the Goals and Objectives will be measured through the corresponding indicators and reported at the final Executive Committee meeting of the year.

As is shown in the table with the 2021 LCC Goals and Objectives (Annex A), the European Commission has proposed a smooth but significant evolution of the 2020 LCC Goals and Objectives developed by China (Annex B) to take due account of today's agenda. A more in-depth description of the proposed changes is outlined below.

### **2 PROPOSED GOALS AND OBJECTIVES FOR 2021**

The 2021 LCC Goals and Objectives are consistent with the 2016-2025 GEO Strategic Plan, but they also incorporate new insights and integrate actions that governments have agreed upon through the Canberra Declaration and that could not be taken up in 2020.

They also take due account of the current pandemic situation that is a big game changer for international cooperation.

### **2.1 Cross-cutting Objective**

A crosscutting objective has been added as a general theme to the other goals and objectives to enable and promote access and use of Earth observations in pandemic/epidemic response and recovery. In 2020, we have seen many good examples of use of Earth observation in different regions of the world to assess the impact of the pandemics on our societies and to inform the citizens about the impact of reduced traffic on the quality of the air or limitation of GHG emissions. As for 2021, it is key to continue building on what GEO realised in this aspect in 2020 and extend it towards a crosscutting view on the different working areas.

### **2.2 The GEO engagement priorities and other key global priorities**

The LCC priority document strongly reaffirms the commitment to GEO's three original engagement priorities – namely, the Paris Agreement, the UN 2030 Agenda and the Sendai Framework for Disaster Risk Reduction – and highlights the ongoing preparatory work for a fourth engagement priority on Resilient Cities and Human Settlements. Lastly, indicators were added specifically to stimulate strategic collaboration needed with WMO and support the GEO Blue Planet contribution to the UN Decade of the Ocean.

### **2.3 Implementation of the Global Earth Observation System of Systems**

Support continues for the 2020 Objectives on the GEO Knowledge Hub and increased access to platforms, analysis-ready data and cloud services is emphasized in the document, with two complementary objectives added.

Firstly, a refocus on the development of the GEOSS infrastructure implementation, which should include the integration of the GEO Knowledge Hub and increase the integration of Regional GEO platforms with the GEOSS infrastructure. To achieve this, an infrastructure evolution roadmap will be developed and work on the metrics and tools for usage monitoring started.

Secondly, to improve access, coordination and sharing of in situ Earth observation data, a new GEO in situ data strategy will be developed and a draft presented during the Plenary 2021.

### **2.4 Engage developing countries in building the Global Earth Observation System of Systems**

Building GEOSS means, in the GEO context, not only its technical development, but also creating the conditions whereby GEO Members have the capacity to benefit from it. To this effect, objectives are included to promote engagement with developing countries including a specific objective to increase engagement within the Pacific Region, noting the efforts of the Pacific Islands Advisory Group.

## **2.5 Increase GEO engagement with small, medium, and micro-sized commercial organizations (SMMEs), with a focus on Earth observations applications**

The commercial sector overall is a critical actor in the provision of services and products for end users, building on global Earth observation infrastructures. GEO has an important catalyst role in reaching a wide range of commercial sector actors with the specific aim to involve SMMEs that have the potential to produce innovative EO-based tools and applications. An action plan will be initiated to identify and address barriers to engagement of SMMEs in GEO, especially in regions where progress has been slow.

## **2.6 Mobilize resources for GEO**

Focus and support will be given to the actions already started in 2020 in order to better highlight and communicate the added value of GEO towards GEO members not necessarily contributing resources to the GEO Trust Fund.

Next to the LCC goals and objectives outlined above, the LCC will engage himself to support the transition of the new GEO Director to guarantee a smooth continuation of the GEO activities. He will also participate in key events relevant to GEO and the implementation of GEOSS.

The proposed 2021 Goals, Objectives and Indicators are listed in Annex A. The Goals, Objectives and Indicators for 2020 are provided in Annex B for reference.

Executive Committee members are requested to review and comment on the proposed 2021 Goals, Objectives and Indicators with the intent of reaching consensus. The agreed Goals and Objectives will then form the basis for Secretariat operational planning and as a supplement to the Concept of Operations in Secretariat Operations Reports.

## ANNEX A

### 2021 Lead Co-chair Goals, Objectives, and Indicators

2021 Goals and Objectives	2021 Indicators
Cross-cutting Objective – GEO enables and promotes access and use of Earth observations in pandemic/epidemic response and recovery.	Resources (dashboards, tools, impact assessments, etc.) made available by the GEO community in support of response and recovery to COVID-19 or future pandemics/epidemics.
<b>Goal 1: Support GEO Members to respond to the GEO engagement priorities and other key global priorities</b>	
<b>Objective 1.1</b> – GEO enables and promotes access and use of Earth observations in responding to and monitoring progress toward the Sustainable Development Goals.	Number of countries using GEO resources in responding to, or monitoring progress toward, the SDGs. Number of use cases included in the EO Toolkit for safe and resilient cities and communities for SDG11 and the New Urban Agenda.
<b>Objective 1.2</b> – GEO enables and promotes access and use of Earth observations in responding to and monitoring progress for disaster risk reduction.	Recognition of GEO contributions to United Nations Disaster Risk Reduction reports. Delivery of Disaster Risk Reduction Working Group tasks on Target E of the Sendai Framework where EO can support national DRR plans.
<b>Objective 1.3</b> – GEO enables and promotes access and use of Earth observations in responding to and monitoring progress for the climate transition.	Acceptance of GEO’s application for Observer status with the UNFCCC. Recognition of GEO contribution to UNFCCC Subsidiary Bodies reports and processes. Recognition of GEO contribution to IPCC reports and processes. Delivery of Climate Change Working Group tasks to engage with UNFCCC and IPCC and to support GEO Members’ adaptation and mitigation actions as defined in the subgroup work plans.
<b>Objective 1.4</b> – GEO enables and promotes access and use of Earth observations in a coordinated way in response to the New Urban Agenda and other challenges facing urban areas, including human settlements.	Urban resilience is accepted by the GEO Plenary as the fourth GEO engagement priority.
<b>Objective 1.5</b> – United Nations organizations and international Conventions recognize GEO as a partner in fulfilling their mandates.	Number of GEO Work Programme activities that have ongoing engagement with United Nations System organizations (including Convention secretariats, specialized agencies, and Regional Commissions). Actions taken by GEO on joint priorities for collaboration with WMO. GEO Blue Planet Initiative contributes to the UN Decade of the Ocean Science.

2021 Goals and Objectives	2021 Indicators
<b>Goal 2: Continue implementation and evolution of the Global Earth Observation System of Systems.</b>	
<b>Objective 2.1</b> – Further development of GEOSS infrastructure implementation, including integration of the GEO Knowledge Hub and Regional GEO platforms with the GEOSS infrastructure.	<p>Agreement of the GEO community and GEO Plenary on an infrastructure evolution roadmap.</p> <p>Usage of the GEOSS Platform (specific metrics to be determined by the GIDTT).</p> <p>Initiation of preparation of GEO ethical guidelines.</p>
<b>Objective 2.2</b> – Development of the GEO Knowledge Hub.	<p>Demonstration of the GEO Knowledge Hub prototype.</p> <p>Number of GEO Work Programme activities contributing knowledge packages to the GEO Knowledge Hub.</p> <p>Feedback from EO community on usefulness and relevance of the GEO Knowledge Hub.</p>
<b>Objective 2.3</b> – The GEO community has increased access to value-added knowledge sharing and application platforms and analysis-ready data.	<p>Number of Earth observation knowledge-sharing and application platforms operated by GEO Work Programme activities and, of these, the number that are referenced in the GEOSS Platform.</p> <p>Number of analysis-ready data sets made available to GEO Members, Participating Organizations, Associates and GEO Work Programme activities.</p> <p>Number of open data sets made available by projects supported by GEO cloud computing programmes.</p>
<b>Objective 2.4</b> – Cloud computing services are made available to the GEO community by multiple providers in a GEO-defined framework.	<p>Number of cloud computing service providers partnering with GEO to provide services.</p> <p>Number of GEO Work Programme activities that have benefitted from GEO cloud credits programmes.</p>
<b>Objective 2.5</b> – Barriers to sharing and coordination of in situ Earth observations data are identified and addressed.	<p>Delivery of Data Working Group tasks related to development of a GEO in situ data strategy.</p> <p>Presentation at GEO Week 2021 of a GEO strategy on in situ data.</p>
<b>Goal 3: Engage developing countries in building the Global Earth Observation System of Systems.</b>	
<b>Objective 3.1</b> – Increased engagement of developing countries and development-related organizations in GEO.	<p>Number of developing countries that report that they benefit from their GEO membership.</p> <p>Number of development-related organizations that are GEO Participating Organizations.</p> <p>Number of developing countries and development-related organizations that participate in GWP activities.</p> <p>Number of developing countries participating in GEO governance bodies.</p>
<b>Objective 3.2</b> – Increased engagement of Pacific Island Countries and Territories (PICTs) .	<p>Number of PICTs that are GEO Members.</p> <p>Number of international organizations based in the PICTs that are Participating Organizations.</p> <p>Number of PICTs and international organizations based in the PICTs that are involved in GEO Work Programme activities.</p> <p>Progress in implementation of the PIAG work plan.</p>

2021 Goals and Objectives	2021 Indicators
<b>Objective 3.3</b> – Broader engagement within GEO Members to develop institutional capacity in their use of Earth observations.	Average number of national ministries per GEO Member engaged in GEO (as GWP contributors or included in the Member registry). Number of national ministries by category that are engaged in GEO (as GWP contributors or included in the Member registry). Number of GEO Members participating in key GEO events (GEO Plenary, GEO Symposium, GEO Data & Knowledge Week, and Regional GEO Symposia).
<b>Objective 3.4</b> – GEO Work Programme (GWP) activities integrate co-design and capacity development into their implementation plans and governance structures.	Number of GWP activities that include individuals from developing countries in leadership positions (co-leads, task leads, members of steering committee, etc.). Percentage of GWP participants who are based in developing countries.
<b>Goal 4: Increase GEO engagement with small, medium, and micro-sized commercial organizations (SMMEs), with a focus on Earth observations applications.</b>	
<b>Objective 4.1</b> – Increased engagement of commercial sector organizations, especially SMMEs, throughout GEO regions.	Number of commercial sector organizations (and SMMEs) recognized as GEO Associates, by GEO region. Number of commercial sector organizations (and SMMEs) participating in GWP activities, by GEO region. Number of commercial sector organizations (and SMMEs) involved in key GEO events (GEO Plenary, GEO Symposium, GEO Data and Knowledge Week), by GEO region.
<b>Objective 4.2</b> – Barriers to engagement of SMMEs in GEO are identified and addressed.	Programme Board Private Sector Subgroup outlines an action plan to which all of GEO contributes.
<b>Goal 5: Mobilize resources for GEO.</b>	
<b>Objective 5.1</b> – Increased contributions from Members to the GEO Trust Fund through continuation of the GEO Pledge Campaign	Total contributions to the GEO Trust Fund. Number of GEO Members contributing to the GEO Trust Fund. Number of GEO Members contributing 50% or more of their Equitable Contribution.
<b>Objective 5.2</b> – Resources to support the work of the GEO Secretariat are obtained from other sources.	Value of contributions to the GEO Trust Fund and in-kind contributions to the Secretariat from sources other than GEO Members.
<b>Objective 5.3</b> – Resources to support GWP activities are obtained from other sources.	Number (and value, where known) of contributions (financial and in-kind) to GWP activities from sources other than GEO Members and Participating Organizations. Number of GWP activities receiving resources from sources other than GEO Members and Participating Organizations.

## ANNEX B

### 2020 Lead Co-Chair Goals, Objectives, and Indicators

2020 Goals and Objectives	2020 Indicators
<b>Goal 1 : Support the GEO engagement priorities and United Nations organizations through Earth observations and services.</b>	
<b>Objective 1.1</b> – GEO supports its Member governments in using Earth observations in responding to and monitoring progress toward the Sustainable Development Goals	GEO makes available tools and platforms to support country achievement of the SDGs and reporting against commitments.
<b>Objective 1.2</b> – GEO supports its Member governments in using Earth observations in responding to and monitoring progress of the Sendai Framework.	GEO produces a policy guidance document jointly with UNDRR on the use of EO in the context of Disaster Risk Reduction.
<b>Objective 1.3</b> – GEO increases the contribution of Earth observations to UNFCCC and IPCC processes.	GEO’s application for Observer status with the UNFCCC is accepted. GEO input is included in UNFCCC and IPCC documents.
<b>Objective 1.4</b> – GEO and UN-Habitat agree on a framework for collaboration related to the New Urban Agenda.	GEO input is included in a UN-Habitat policy guidance on implementation of the New Urban Agenda.
<b>Objective 1.5</b> – United Nations organizations and international Conventions recognize GEO as a partner in fulfilling their mandates.	GEO develops joint action plans linked to the GEO Work Programme (GWP) with at least two UN organizations or Convention Secretariats.
<b>Goal 2 : Continue implementation of the Global Earth Observation System of Systems.</b>	
<b>Objective 2.1</b> – Implementation of the GEO Knowledge Hub.	Demonstration of the pre-release (alpha) version of the GEO Knowledge Hub in 2020 GEO Week in Port Elizabeth.
<b>Objective 2.2</b> – The GEO community has increased access to data sharing and application platforms and analysis-ready data.	Number of data-sharing and application platforms deployed, and analysis-ready data sets made available by GEO Members, Participating Organizations and GEO Work Programme activities (as identified by these entities in response to a call by the Secretariat).  Number of open data sets made available by projects under the GEO-AWS Cloud Credits Programme and the GEO-GEE Programme.  <i>Additional indicator of progress on analysis-ready data sets to be developed in consultation with CEOS.</i>
<b>Objective 2.3</b> – Cloud computing services are made available to the GEO community by multiple providers in a GEO-defined framework.	Number of cloud computing service providers partnering with GEO to provide services.  Total value of cloud service credits and licenses made available to the GEO community through these services.

2020 Goals and Objectives	2020 Indicators
<b>Goal 3 : Engage developing countries in building the Global Earth Observation System of Systems.</b>	
<b>Objective 3.1</b> – Increased engagement of developing countries.	Number of developing countries that are GEO Members. Number of development-related organizations that are GEO Participating Organizations. Number of developing countries and development-related organizations that participate in GWP activities.
<b>Objective 3.2</b> – Broader engagement within GEO Members	Average number of national ministries per GEO Member engaged in GEO (as GWP contributors or included in the Member registry). Number of GEO Members participating in key GEO events (Plenary, GEO Symposium, GEO Data & Knowledge Week, and Regional GEO Symposia).
<b>Objective 3.3</b> – GEO Work Programme (GWP) activities integrate co-design and capacity development into their implementation plans and governance structures.	Number of GWP activities that include individuals from developing countries in leadership positions (co-leads, task leads, members of steering committee, etc.). Percentage of GWP participants who are based in developing countries.
<b>Goal 4 : Increase GEO engagement with small, medium and micro-sized commercial organizations (SMMEs), with a focus on Earth observations applications.</b>	
<b>Objective 4.1</b> – Increased engagement of commercial sector organizations, especially SMMEs.	Number of commercial sector organizations (and SMMEs) recognized as GEO Associates. Number of commercial sector organizations (and SMMEs) participating in GWP activities. Number of commercial sector organizations (and SMMEs) involved in key GEO events (GEO Plenary, GEO Symposium, GEO Data and Knowledge Week).
<b>Objective 4.2</b> – Contributions from commercial sector organizations to GEO are publicly recognized.	Contributions from commercial sector organizations are highlighted on the GEO website and in the annual GEO Highlights report.
<b>Goal 5 : Mobilize resources for GEO.</b>	
<b>Objective 5.1</b> – Increased contributions from Members to the GEO Trust Fund	Total contributions to the GEO Trust Fund. Number of Members contributing to the GEO Trust Fund. Number of GEO Members contributing 50% or more of their Equitable Contribution.
<b>Objective 5.2</b> – Resources to support the work of the GEO Secretariat are obtained from other sources.	Value of contributions to the GEO Trust Fund and in-kind contributions to the Secretariat from sources other than GEO Members.
<b>Objective 5.3</b> – Resources to support GWP activities are obtained from other sources.	Number (and value, where known) of contributions (financial and in-kind) to GWP activities from sources other than GEO Members and Participating Organizations. Number of GWP activities receiving resources from sources other than GEO Members and Participating Organizations.