

## **Toward a GEO Strategy for Capacity Development**

*This document is submitted to the Program Board for discussion.*

### **1 INTRODUCTION**

Capacity building has been a feature of GEO Work Plans and Work Programmes throughout its existence. Over the last few years, GEO's efforts on capacity building have been coordinated and facilitated by the Capacity Building Working Group (CBWG), which operates within the framework of the Capacity Building Coordination Foundational Task. This Foundational Task was established to support the realization of the GEO Capacity Building Strategy and currently coordinates the capacity building activities associated with the acquisition, processing and use of Earth observation data and information for policy and decision-making. It includes the definition and use of clear mechanisms for identification of GEO's "global capacity building offer", its gaps, and promotion of coordinated actions to address the gaps.

The strategy that guides GEO capacity building efforts was approved at the GEO-III Plenary in November 2006. Five objectives and six priority actions were linked and mapped in a diagram. Some priority actions have been achieved and others are in need of revision or updating. Considering our rapidly changing world with new and complex challenges and related capacity needs, a revision of the capacity building vision and strategy, parallel to the development of the 2020-2022 GEO Work Programme, is urgently needed.

Crucial for the coming period will be to define what capacity building in the GEO context will entail in practice, and for which target audiences. We must also ask if the traditional understanding of capacity building is still valid in a changing GEO landscape. Following this examination, the mandate, tasks and responsibilities of the CBWG will need to be re-aligned accordingly.

GEO is currently in the process of reflecting on its vision, focusing on a more result-oriented and project-driven secretarial approach and the evolution of the GEOSS platform into a Knowledge Hub. The challenge is moving from innovations to scalable services focusing on the development of robust, reproducible outcomes, results and even societal impact. The CBWG can contribute to this process, ensuring societal impact by supporting and facilitating the design, development, implementation and evaluation of capacity building interventions of the Flagships, Initiatives, Regional GEO's and (in less extent) the Community Activities.

This document aims to reflect on the actual vision on CB and the current state of affairs and achievements regarding the WG-CBC work plan 2017-2019 and to pave the road for a new work plan 2020-2022 in line with the result-oriented and project driven vision of GEO

### **2 CURRENT APPROACH TO CAPACITY BUILDING IN GEO**

The 2017-2019 GEO Work Programme clearly describes the target audience of the GEO's capacity building efforts: "engaging globally with a broad range of user communities, from managers, policy makers and scientific researchers and engineers, to civil society, governmental and non-governmental organisations, international bodies and the commercial sector".

Building capacity, as well as sustaining and enhancing existing capacity, is essential for developing the competencies of GEO Members and Participating Organizations in the effective use of Earth observations for responding to societal challenges and addressing sustainable development issues.

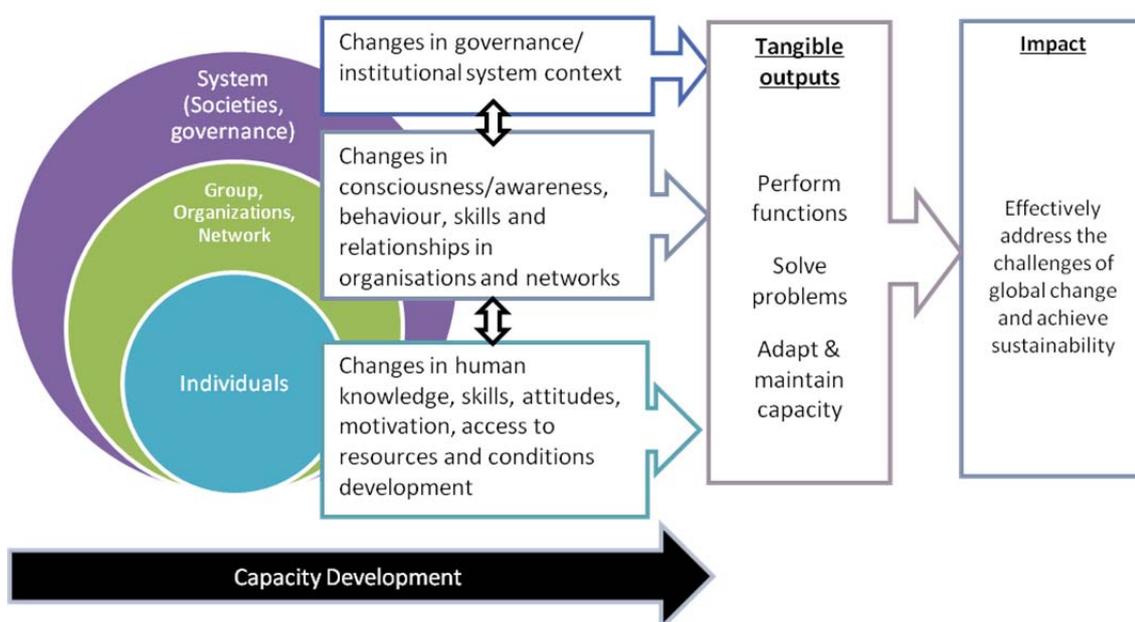
The capacity building activities in GEO aim to assist developed and developing countries and regions in increasing their technical and human capacity to acquire, share, store, maintain and fully utilize Earth observation data and information in the decision-making process; demonstrate solutions, disseminate best practices showcasing the value of Earth observations and promote the engagement of institutional users worldwide.

### 3 PROPOSAL FOR A REVISED VISION FOR CAPACITY DEVELOPMENT

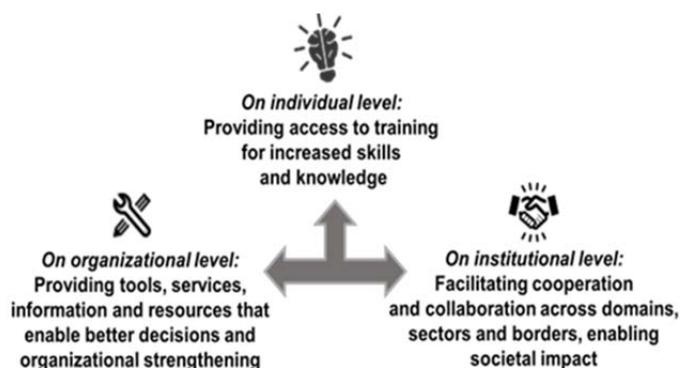
The following is proposed to reshape vision of capacity building within GEO and to guide the development of a capacity building work plan for 2020-2022. It requires further discussion and reflection within the CBWG as well as within GEO governing bodies, Work Programme activities, and the broader GEO community.

#### 3.1 Promoting a Holistic Approach to Capacity Development

GEO’s interpretation of capacity building is based on the definition established at the 1992 United Nations Conference on Environment and Development (UNCED) which encompasses human, scientific, technological, organisational and institutional resources and capabilities. UNCED recognised that a fundamental goal of capacity building is to enhance the abilities of stakeholders to evaluate and address crucial questions related to policy choices and different options for development. Other (similar) definitions exist. According to the definition of the UNDP, capacity building is about transformations that empower individuals, leaders, organisations and societies. The OECD Development Cooperation Directorate defines capacity building as the ability of people, organisations and society as a whole to manage their affairs successfully. All these definitions refer to a holistic and systemic approach to capacity building which encompasses different levels of interventions; individual, organizational and institutional / societal, which interrelation are visualized in the following scheme:



Different capacity building activities can be distinguished on the different intervention levels:



Final results of these activities with a GEO context could include:

- On individual level: understanding and use of new technologies;
- On organizational level: implementation of a strategy to generate and disseminate the best spatial information based on new (data cube) technologies; and
- On institutional level: liaising with technology providers and knowledge institutes to ensure the information outputs are aligned with the expectations and needs of the end-users.

### 3.2 Co-creation and the Theory of Change Model as Guiding Principles for Capacity Building

In the world of development cooperation, capacity building can be perceived in different ways. Flagships, initiatives and regional GEO's have the tendency to focus on individual capacity strengthening by means of training, massive open online courses (MOOCs), webinars, etc. sharing new knowledge, skills and insights (which can be considered as the traditional approach to capacity building). However, as indicated before, a more holistic vision of capacity building might be of added value when it comes to real and measurable impact. Co-creation of capacity building efforts where supply and demand comes together is a methodology in support to this holistic approach. The best way to introduce and explain the concept of *co-creation* is by presenting an example:

**Traditional capacity building approach:** Party A, the training provider, develops a training programme based on a specific request or organizational needs assessment, introducing the field of expertise and experiences. Party B, the requesting organization or end-user, participates in the event as recipient. Assessment takes place primarily on the level of participant satisfaction.

**Co-creation approach:** A "wicked" or complex problem is addressed by a joint effort, combining state-of-the-art technologies provided by party A, with cultural and contextual knowledge by party B and expressions of specific needs in terms of knowledge and skills by party C. Assessment takes place on the level of real learning, performance improvement on the job and a better understanding and future management of the problem.

Co-creation is about equal partnership, shared ownership, joint responsibility and stakeholder engagement, recognising the needs, ambitions, knowledge and specific expertise of the participating parties. It is about a collaborative process of problem-solving within a learning cycle, rather than just providing the solutions. It is about merging and strengthening the capacities and capabilities of all involved (individuals, organisations and society as a whole) to create value. It taps into the collective insight and potential of groups, generating breakthrough solutions. The collaboration and discussions between parties can lead to ideas for research or project development when knowledge gaps are identified. Hence, it is about addressing the desired change by jointly achieving outcomes, results and even societal impact, rather than focusing on the quality and quantity of inputs and outputs.

The concept of co-creation (also called co-design) should ideally go hand-in-hand with a theoretical reference model that visualizes the pathways or strategic directions needed to achieve the desired impact or change and a monitoring and evaluation system to assess both the efficiency and effectiveness of the process and the level of achievement of the final results of the CB interventions.

The “Theory of Change” is a useful model to define the pathways that lead to the desired impact or change. This model is essentially a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It focuses on mapping out or “filling in” what has been described as the “missing middle” between what a program or change initiative does (its activities or interventions) and how these lead to desired goals being achieved.

Other frameworks can be added as a reference for impact assessment like baseline studies, logic models, results chain, etc. In a broader context, the Sustainable Development Goals, the Paris Agreement, the Sendai Framework and other international policy statements should be used as a reference.

### **3.3 From Coordination to Facilitation and from Capacity Building to Capacity Development**

The CBWG within the Capacity Building Coordination Foundational Task, supported by the Secretariat, and provides essential support to GEO Flagships, GEO Initiatives, and GEO Community Activities. In the 2017-2019 period, the CBWG has been focusing on the coordination of GEO’s capacity building efforts through, among other means, by maintaining databases and calendars of activities and by providing reports on the number and modality of CB efforts conducted under the GEO regional and thematic activities. In this context, the GEOCAB Portal served as a key communication and information resource portal.

For the 2020-2022 GEO Work Programme, it is proposed that the CBWG focus primarily on the facilitation of GEO’s capacity building efforts, promoting the principle of co-creation and providing conceptual support to the design, development, implementation and evaluation of CB activities on the three levels of intervention. In this regard, the audience for these efforts consists of two main layers: the (scientific) communities of the GEO Flagships, Initiatives and Regional GEOs (the “providers”), which would be the main target audience of the CBWG, and the end users of Earth observations (the “receivers”) would be the primary target audience of the GEO Flagships, Initiatives, and Regional GEOs.

Additionally, preference exists in some regions to use the term “capacity development” rather than “capacity building”. “Building” implies starting from zero. “Development” occurs from any baseline and GEO partners have varying levels of capacity, though all can benefit from development. Considering the approaches as described above we prefer to use the term “capacity development” (CD) because it better reflects the continual process of collaboration and learning. Rebranding to CD also reflects the revived ambitions of the Working Group.

## **4 CONCLUSION**

The Secretariat recommends that GEO’s capacity development support should have a dedicated focus on strengthening the capabilities of the Flagships, Initiatives and Regional GEO’s (and those Community Activities with potential to become an Initiative) in designing, implementing and evaluating their CD interventions to improve the envisaged impact. The CBWG should be rebranded and reinvigorated to support this new focus.

Further, based on the experience with implementation of the Capacity Building Coordination Foundational Task in 2016 to 2018, and the Secretariat resources available to support capacity development implementation going forward, the Secretariat recommends that capacity development support be integrated with the proposed new Foundational Task on Work Programme Support (see document PB-12.05). This will enable the capacity development expert on the Secretariat to be part of a team that will provide guidance and assistance to all Work Programme activities, with particular emphasis on GEO Flagships and Initiatives. Doing so will help to provide support to a larger number of Work Programme activities and will help ensure continuity through personnel changes in the Secretariat.