
Report
43rd Executive Committee Meeting
Geneva, Switzerland, 8-9 March 2018
(As accepted at the 44th Executive Committee Meeting)

EXECUTIVE SUMMARY

Chair: Stephen Volz, United States.

1 GENERAL BUSINESS

1.1 Welcome from Lead Co-Chair and Co-Chairs

- The Executive Committee noted that this would be the final Executive Committee with Ms Barbara Ryan attending as Secretariat Director;
- Mr Gilberto Câmara, incoming Secretariat Director, was welcomed as an Observer to the Executive Committee meeting;
- The Secretariat Director provided reassurance of her priority for a smooth transition to the next Director.

1.2 Adoption of Agenda (Document 43.1 – for decision)

- The agenda for the 43rd Executive Committee meeting was adopted as distributed.

1.3 Draft Report of the 41st Executive Committee Meeting (Document 43.2 – for decision)

- The report of the 41st Executive Committee Meeting (Washington, D.C., United States, 24 October 2017) was approved as distributed.

1.4 Draft Report of the 42nd Executive Committee Meeting (Document 43.3 – for decision)

- The report of the 42nd Executive Committee Meeting (Washington, D.C., United States, 27 October 2017) was approved as distributed.

1.5 Review of Action Items from Previous Meetings (Document 43.4 – for decision)

- The Executive Committee approved the closing of all Actions from the 40th Executive Committee meeting, pending discussion of referenced documents.

1.6 Update on Secretariat Operations (Document 43.5 – for information)

- The Executive Committee took note of the Secretariat Operations Report and expressed its appreciation for the continuing efforts of the Secretariat;
- The Secretariat will explore broadening the range of social media channels in its communications.

2 STRATEGIC OUTLOOK

2.1 Roles and Responsibilities of Lead Co-Chair (Document 43.6 – for decision)

- The Executive Committee endorsed the document, subject to revisions to reflect:
 - A fixed rotation among the four Co-Chairs;
 - A commitment that a Lead Co-Chair would be appointed ad hominem by Co-Chair Member government and as such ensuring that a single and consistent senior-level official would fulfil the duties Lead Co-Chair during their turn in the rotation.

Action 43.1: Suggestions from Executive Committee Members on revised language regarding roles and responsibilities of the Lead Co-Chair to be sent to the Secretariat. **Due: 8 March 2018.**

2.2 Executive Committee Priorities for 2018-2019 (Presentation by Lead Co-Chair)

- Outcomes addressed under item 2.3.

2.3 Secretariat Work Planning (Document 43.7 – for discussion)

- The Executive Committee endorsed the proposed approach to Secretariat Work Planning, while noting the desirability of summarizing progress toward the Objectives using quantitative metrics, status categories or similar methods;
- The Executive Committee also requested that the Secretariat review the Objectives with the aim of refocusing and reducing the current set.

Action 43.2: Secretariat to report on progress toward achievement of the Executive Committee Objectives. Secretariat to propose revisions to the Objectives to support assessment of progress and to reduce the total number. **Due: 44th Executive Committee meeting.**

3 IMPLEMENTING PRIORITIES

3.0 United Kingdom's Perspective on Resilience (Presentation by Nigel Clifford, Chief Executive Officer, Ordnance Survey)

- The Executive Committee thanked Mr Clifford for his informative and relevant presentation.

3.1 Implementing Priorities (Document 43.8 – for discussion)

- The Executive Committee took note of the engagement efforts that have been undertaken by the Secretariat in collaboration with GEO Members and Participating Organizations, and of those activities planned for the upcoming year;
- The Executive Committee also requested that additional details be provided for the actions where Executive Committee Member engagement was being requested.

Action 43.3: Secretariat to provide more specific language and contact points to support Executive Committee actions on the Engagement Priorities. **Due: 1 May 2018 and on-going as necessary.**

3.2 Commercial Sector Engagement (Document 43.9 – for discussion)

- The Executive Committee endorsed the proposed approach on implementing engagement with the commercial sector.

Action 43.4: Secretariat, with South Africa and Australia to provide Executive Committee with an update on the Digital Earth Africa project. **Due: 44th Executive Committee meeting.**

Action 43.5: Secretariat to provide Executive Committee with information on current commercial sector involvement in the GEO Work Programme. **Due: 44th Executive Committee meeting.**

4 FINANCE AND RESOURCE MOBILIZATION

4.1 Report of the Budget Working Group (Document 43.10 – for information; Document 43.11 – for information)

- The Executive Committee took note of the Reports.
- The Budget Working Group was asked to consider:
 - Methods to account for both cash and in-kind contributions to the core functions of the Trust Fund as compared to the contributions to the Work programme in financial reporting;
 - Ways to encourage non-contributing Members to contribute to the Trust Fund; and
 - Ways to recognize Members that are contributing at or above 100% of their indicative scale amount.

Action 43.6: The Budget Working Group to report to Executive Committee on their proposals for accounting for both cash and in-kind contributions to the core functions of the Trust Fund as compared to the contributions to the Work programme in the financial reports, in addition to ways to recognize Members contributing at or above 100% and actions taken to encourage non-contributing Members to contribute to the Trust Fund. **Due: 44th Executive Committee meeting.**

4.2 Resource Mobilization (Document 43.12 – for discussion)

- The Executive Committee:
 - Urged its Members to lead by example;
 - Requested the Secretariat to plan for alternative approaches in the event that the minimum sustainable budget amount is not reached;
 - Requested the Secretariat, in consultation with the Budget Working Group, to propose changes to the Rules of Procedure for Plenary decision regarding the expectation on Executive Committee Members to contribute to the Trust Fund;
 - Supported the initiative of some Executive Committee Members to present a proposal to the Arctic Science Ministerial regarding a secondment to address cold regions activities; and
 - Agreed that the Secretariat should proceed with implementation of fundraising.

Action 43.7: Secretariat, in consultation with the Budget Working Group, to propose changes to the Rules of Procedure for Plenary decision regarding the expectation on Executive Committee Members to contribute to the Trust Fund. **Due: 44th Executive Committee meeting.**

Action 43.8: Secretariat to provide position descriptions and expectations (e.g., travel to Geneva and Plenary) related to staffing gaps that could be filled by secondments. **Due: 30 April 2018.**

5 2017-2019 GEO WORK PROGRAMME

5.1 Report from the Programme Board (Document 43.13 – for information)

- The Executive Committee took note of the Programme Board report. Executive Committee also recognized the important roles of Regional GEOSS Initiatives and welcomed the efforts by Programme Board to provide additional guidance to these Initiatives and to identify synergies among them and with the rest of the Work Programme..

Action 43.9: Roles and expectations for Regional GEOSS Initiatives to be discussed at Executive Committee. **Due 44th Executive Committee**

Action 43.10 Programme Board requested to recognize the differences between global thematic and regional / sub-regional Initiatives. **Due: 45th Executive Committee meeting.**

6 GEO PLENARIES AND MINISTERIAL

6.1 GEO Plenaries and Ministerial (Document 43.14 – for discussion)

- The Executive Committee thanked the GEO Week 2018 Working Group for their efforts;
- The Executive Committee requested the Working Group to consider the experiences with previous Plenary panel sessions in their planning and emphasized that Plenary should remain an occasion for taking decisions.

Action 43.11: Secretariat to propose a substantial case and key messages that could form a basis for a 2019 Ministerial. **Due: 44th Executive Committee meeting.**

6.2 Mid-Term Evaluation (Document 43.15 – for decision)

- The Executive Committee endorsed the recommendations to delay the completion of the Mid-Term Evaluation to 2020 and to use a stakeholder perspectives approach.

Action 43.12: Secretariat to present the scope and timing of the Mid-Term Evaluation to Plenary for approval. **Due: 45th Executive Committee meeting.**

7 PARTICIPATING ORGANIZATIONS

7.1 Participating Organizations (Document 43.16 – Part 1 for discussion; Part 2 for decision)

- The Executive Committee created a Subgroup (EC, USA, Australia, Secretariat) to:
 - Explore modifications to the eligibility criteria for recognition as a GEO Participating Organization roles and responsibilities;
 - Identify options for a new category of affiliated organizations; and
 - Examine the potential for a membership fee or other contribution to the Trust Fund from Participating Organizations and/or affiliated organizations.
- The Executive Committee approved the applications from:
 - African Climate Change Research Centre (ACCREC);
 - Asian Disaster Preparedness Center (ADPC);
 - Afriterrra Foundation;

- Centre for Environment and Development for the Arab Region and Europe (CEDARE);
- Environment Pulse Institute (EPI);
- IHE Delft Institute for Water Education;
- Radiant Earth; and
- Resources for the Future (RFF).
- The Executive Committee did not approve the applications from:
 - La Brique (ALB); and
 - Community and Rural Education Society (CARES).
- The Executive Committee deferred its decision, pending establishment of a potential GEO Affiliate category, for the applications from:
 - AmericaView Inc.;
 - Cyprus Remote Sensing Society (CRSS); and
 - Sat-Drones LLC.

Action 43.13: Subgroup to produce a white paper with proposals for modifications to the eligibility criteria for recognition as a GEO Participating Organization; options for a new category or affiliated organizations; and proposal for a membership fee and/or contribution to the Trust Fund for consideration by Executive Committee, with a view to producing recommendations to the GEO-XV Plenary as a modification to the GEO Rules of Procedure. **Due: 44th Executive Committee meeting.**

8 REVIEW OF SESSION OUTCOMES AND ACTION ITEMS

- The Executive Committee reviewed and approved the list of meeting outcomes and new action items.

8.1 Closing Remarks

- The Executive Committee thanked Ms Barbara Ryan for her contributions and dedication to GEO and to the Executive Committee during her time as Secretariat Director.

Report
43rd Executive Committee Meeting
Geneva, Switzerland, 8-9 March 2018
(As accepted at the 44th Executive Committee Meeting)

FULL REPORT

Thursday, 8 March 2018

Meeting convened at 10:30

Chair: Stephen Volz, United States.

1 GENERAL BUSINESS

1.1 Welcome from Lead Co-Chair and Co-Chairs

The Lead Co-Chair opened the meeting by welcoming Executive Committee Members, Observers and the Secretariat. He highlighted that this was Ms Barbara Ryan's last Executive Committee meeting as Secretariat Director, which has been a very busy six years in which GEO has undergone considerable growth. He noted that Ms Ryan has led the formation and development of numerous partnerships with various organizations that will continue to benefit the GEO community for many years to come. He also recognized and welcomed Mr Gilberto Câmara, the incoming Secretariat Director, as an Observer to the meeting, a practice continued from the previous transition of Secretariat Directors.

Mr Mmboneni Muofhe, South Africa Co-Chair, welcomed all Executive Committee Members and especially the new Members. He noted that the meeting was at a time where there are a number of challenges that the Committee needed to face. He stated that it was crucial that Executive Committee Members, in addressing these challenges, reflect deeply on their own role on the Committee and to decide how best to lead by example. In reflecting on the progress that has been made, it is essential that, for areas where progress has been insufficient, that GEO not continue using the methods of the past but that new approaches be explored.

Mr Qi'an Wang, on behalf of China Co-Chair Huang Wei, noted his pleasure at attending his first Executive Committee meeting. On behalf of the China Co-Chair he thanked the Lead Co-Chair and the Secretariat Director for organizing the meeting. He also thanked Ms Ryan for her outstanding work and contribution to GEO during her period as Secretariat Director. Mr Wang welcomed Mr Câmara to the meeting and recognized his excellent work. Mr Wang then mentioned the progress in the Asia-Oceania region. China has been actively promoting engagement with GEO within the region and will be meeting with Cambodia GEO representatives, and have been in contact with Laos, Sri Lanka and other Asia-Oceania countries that are not currently GEO Members to encourage them to participate in GEO. He noted that the GEO Junior Professional Officer (JPO) will join the GEO Secretariat in April. China, as regional Co-Chair, is also involved in the preparation of the GEO Week 2018. Finally, Mr Wang announced that China will host an Asia-Oceania GEOSS international conference and training workshop in May, as well as other training activities in Laos and Nepal. He invited Executive Committee Members to attend these events to share their ideas and experience.

Mr Andrea Tilche, on behalf of the European Commission Co-Chair, joined the other Co-Chairs in welcoming the other Executive Committee Members, Observers and Secretariat staff, in particular those attending for the first time and for the last time. Mr Tilche explained that European Commission Principal was unable to attend the meeting due to recent changes in the positions of Directors-General within the Commission. It was expected that the new Principal will be in place in time for the next Executive Committee meeting. Mr Tilche assured Executive Committee Members of the Commission's intention to provide representation at the highest level to GEO and reaffirmed its continued commitment to GEO and to the Executive Committee. He thanked the Lead Co-Chair and his staff for their work in preparing the meeting, noting their experience with the dedication from the United States on the preparation of GEO Week 2017. Mr Tilche pledged his support to Mr Volz's leadership in 2018, noting that 2018 will be a year of transition due to the change of Director. He also noted that the meeting was taking place on International Women's Day.

Ms Barbara Ryan, Secretariat Director, added her welcome to Executive Committee Members. In reference to the meeting being her last as Secretariat Director, she noted that the key part for her was the relationships developed through participation in GEO. She repeated her commitment to achieving a smooth transition to the next Director and, in that context, referred to her collaboration with Mr Câmara over many years and who she welcomed to the Executive Committee meeting.

Outcomes: The Executive Committee noted that this would be the final Executive Committee with Ms Barbara Ryan attending as Secretariat Director. Mr Gilberto Câmara was welcomed as an Observer to the Executive Committee meeting. The Secretariat Director provided reassurance of her priority for a smooth transition to the next Director.

1.2 Adoption of Agenda (Document 43.1 – for decision)

Outcome: The agenda for the 43rd Executive Committee meeting was adopted as distributed.

1.3 Draft Report of the 41st Executive Committee Meeting (Document 43.2 – for decision)

Outcome: The report of the 41st Executive Committee Meeting (Washington, D.C., United States, 24 October 2017) was approved as distributed.

1.4 Draft Report of the 42nd Executive Committee Meeting (Document 43.3 – for decision)

Outcome: The report of the 42nd Executive Committee Meeting (Washington, D.C., United States, 27 October 2017) was approved as distributed.

1.5 Review of Actions from Previous Meetings (Document 43.4 – for decision)

The Secretariat Director reviewed the responses to each of the Actions from the previous meeting. Actions 41.1 and 41.3 were completed at the GEO-XIV Plenary in the context of changes to the Rules of Procedure. The remaining Actions deal with matters that will be discussed during the 43rd Executive Committee meeting and thus she recommended that approval of the responses to these Actions be deferred until the end of the meeting.

Outcome: The Executive Committee approved the closing of all Actions from the 41st and 42nd Executive Committee meetings, pending discussion of referenced documents.

1.6 Update on Secretariat Operations (Document 43.5 – for information)

The Secretariat Director began by noting that the presentation had been revised since it was first shared with Executive Committee Members. The new version focuses only on key priorities, but drew attention to the more detailed information available in the document itself. On the engagement priority to support the 2030 Agenda for Sustainable Development, Ms Ryan reminded Executive Committee of the intervention at the GEO-XIV Plenary by the United Nations Convention to Combat Desertification (UNCCD) to request GEO to assist them on Land Degradation Neutrality. This is believed to be the

first instance of an international Convention asking GEO for this kind of engagement, a seminal event which GEO is striving to achieve in relation to its other priorities. She also drew attention to the joining of the Global Partnership for Sustainable Development Data (GPSDD) with GEO and the Committee on Earth Observations Satellites (CEOS) on development of an African Regional Data Cube.

With respect to the Paris climate agreement, significant progress was made in building the relationship with the United Nations Framework Convention on Climate Change (UNFCCC), thanks in large measure to the work of -Mr Andre Obregon, Expert Coordinator on Climate in the GEO Secretariat. GEO has received more support from member countries in the UNFCCC, has been offered exhibition space, side events with Germany and Japan, and an invitation to an informal meeting of their Subsidiary Body for Scientific and Technological Advice (SBSTA). Since GEO has yet to receive official Observer status with the UNFCCC, further progress in this area will depend on GEO Member support for this status. The Secretariat Director also noted the formation of a Steering Committee for the GEO Carbon and GHG Initiative including UNFCCC, intended to bridge gaps among the partners.

Regarding support to the Sendai Framework, the Secretariat Director noted that GEO is achieving increased visibility with the United Nations Office for Disaster Risk Reduction (UNISDR), in large part through the work of Mr Steven Ramage, Ms Akiko Noda and Mr James Norris from the Secretariat. UNISDR has invited GEO to its Global Forum on Science and Technology, an upcoming Risk Modelling Workshop, and to join its Advisory Committee for their next Global Assessment Report. She also thanked the United Kingdom for providing Mr Norris through a virtual secondment to the Secretariat.

In general, the Secretariat Director noted that steady progress was being made in all three priority areas due to having dedicated resources within the Secretariat to make the policy connections, particularly with United Nations agencies.

The importance of having dedicated Secretariat staff in place was also highlighted with respect to the Foundational Tasks. Where staff are in place, for example the support to the GEOSS Platform, steady progress is also visible. In areas where there are gaps, for example on coordination of in-situ observations, progress is much slower to happen, despite the best efforts of the volunteer task teams or working groups. Looking more closely at the GEOSS Platform, Ms Ryan discussed some statistics concerning use and users of the data resources. She also drew attention to the preparations for the 3rd Data Providers Workshop, to be held in Frascati, Italy on 2-4 May 2018 with the support of the Italian National Research Council (CNR) and the European Space Agency (ESA).

Mr Ian Jarvis, Program Manager for GEOGLAM, provided an example of the impact of GEO is making, highlighting a special alert on food security released by the United Nations Office for Humanitarian Coordination. The alert drew attention to an emerging drought situation in southern Africa which has the potential to create a food crisis. The alert referred directly to the February GEOGLAM report and called on nations to contribute to understanding the scale and severity of the event. It also recommended increasing monitoring to support more frequent updates of crop status in areas of high risk. The Secretariat Director then reminded Executive Committee of the importance of broadening national delegations to include, for example, departments of agriculture.

Ms Ryan then highlighted the key role of communications and monitoring and evaluation coordination in the Secretariat in providing information to demonstrate the impact and value of GEO activities. She noted that a Communicators Network is being set up to help coordinate messaging among GEO Members and to ensure that the materials being produced are meeting Members' needs and asked that Executive Committee Members identify a communicator from their institutions to participate in this network.

The Lead Co-Chair asked whether the Secretariat has a preferred approach regarding its support to the regional GEOSSes. The Secretariat Director responded that the preference was for a relatively "light

touch” that would provide assurance to the Secretariat that the regions are honouring the core principles of GEO.

South Africa asked how the Secretariat’s work could be strengthened by engagement undertaken by Members themselves. The Secretariat Director responded that GEO Members could pick up work, such as coordination of Foundational Tasks, if there was no capacity for this within the Secretariat.

The European Commission asked whether the recruitment planned for 2018 would be managed without “locking in” expenses during the period of transition to the next Director. The Secretariat Director reiterated her commitment to a smooth transition, but noted that some of the requirements could not wait.

Germany noted the progress made with the UNFCCC, but requested confirmation regarding GEO’s request for Observer status. The Secretariat Director stated that that GEO will need to resubmit its application including strengthened language on legal status that was approved at the GEO-XIV Plenary. The experience being obtained through collaboration with the UNFCCC Secretariat may also help. Ultimately, however, the decision will be made by the parties to the Convention and thus GEO Members need to speak with their representatives to ensure they are aware of and support GEO’s request.

China asked whether the Secretariat could include usage numbers for regional social media platforms in addition to those shown in the presentation. Mr Ramage noted that the Secretariat is expanding its use of social media, but is limited by the capacity to work only in English and so support from Members would be required to connect with non-English social media.

Outcomes: The Executive Committee took note of the Secretariat Operations Report and expressed its appreciation for the continuing efforts of the Secretariat. The Secretariat will explore broadening the range of social media channels in its communications.

2 STRATEGIC OUTLOOK

2.1 Roles and Responsibilities of Lead Co-Chair (Document 43.6 – for decision)

The Lead Co-Chair introduced the item by referring to Action 42.4 in which the Lead Co-Chair was requested to draft a set of principles regarding the roles and responsibilities of, and interactions between, the Lead Co-Chair and the Secretariat. He noted that this role was pioneered by Mr Robert-Jan Smits in 2017 and thanked Executive Committee Members for their input into drafting the document.

Mr Volz drew attention to the three key roles identified in the document. He noted that the commitment to serve as Lead Co-Chair is a personal commitment, not an institutional one, and depends on the continuity provided by having one individual in the role for the entire year. Mr Volz also highlighted the best practices section at the end of the document, which define the cadence of when Executive Committee documentation moves between the Secretariat, the Lead Co-Chair and the whole Executive Committee.

The Secretariat Director agreed that the role of Lead Co-Chair had proven to be very useful to the Secretariat in 2017 with the European Commission and now with the United States. She cautioned, however, that despite the best intentions in following the practices described in the document, revisions to documents after the initial distribution would continue to occur, just as they do in all international organizations. For this reason, Executive Committee Members are encouraged to refer regularly to the electronic repositories (FTP site and cloud drive) for revised documents. The Secretariat will continue to mark the revisions so Members will be able to quickly identify the changes to the documents.

The European Commission stated that it was a good document, but noted that there were a few places in the document that gave an impression that there was a further layer of governance based on the four Co-Chairs, which was not intended. The Commission also recommended that the approval of the Lead Co-Chair should be subject, in some way, to the approval of the Executive Committee.

The Lead Co-Chair proposed that, to avoid editing the document during the meeting itself, that Executive Committee Members provide their comments to him by the end of the day. Mr Volz also confirmed that there was not an intention to create an additional layer of governance, that the references to consultation with the other Co-Chairs was intended to facilitate rather than control discussion.

South Africa asked whether Executive Committee documents could be made available with greater lead time.

China suggested that the sequence of the Lead Co-Chairs should be fixed in advance. If a Member is unable to take on the role of Lead Co-Chair at the time of their turn in the rotation, then they should negotiate the timing on the role with the next country in the rotation.

The Republic of Korea asked that documents be provided to all Executive Committee Members at the same time and not to Co-Chairs prior to the others. It was also requested that any revisions should be clearly shown in documents.

Finland suggested that a wiki system be used to allow Executive Committee Members to provide their comments to documents.

Morocco proposed that consideration be given to engaging other Members in providing input through regional forums, possibly under the leadership of the Caucus Co-Chair.

The Secretariat Director agreed that the lead time for documents could be advanced a week or so if that was the desire of Executive Committee. However, this could result in more revisions to documents as information is updated, for example, in financial documents. She also noted that this might require a change to the GEO Rules of Procedure.

The United States asked whether there was an inconsistency between the proposal to approve the next Lead Co-Chair and the proposal to fix the rotation among the Co-Chairs. Finland responded that the choice of Lead Co-Chair is not only about the country but is also about the specific person. The Lead Co-Chair agreed the role is individual, but the rotation allows countries to plan. The onus is on the Co-Chair countries to ensure that senior level people are available to fill the position of Lead Co-Chair.

Outcome: The Executive Committee endorsed the document, subject to revisions to reflect:

- A fixed rotation among the four Co-Chairs; and
- A commitment that a Lead Co-Chair would be appointed ad hominem by Co-Chair Member government and as such ensuring that a single and consistent senior-level official would fulfil the duties Lead Co-Chair during their turn in the rotation.

Action 43.1: Suggestions from Executive Committee Members on revised language regarding roles and responsibilities of the Lead Co-Chair to be sent to the Secretariat. **Due: 8 March 2018.**

2.2 Executive Committee Priorities for 2018-2019 (Presentation by Lead Co-Chair)

The Lead Co-Chair reviewed the Goals and Objectives for 2018 that had been agreed at the 42nd Executive Committee meeting. He noted that these Goals are not independent missions; they aim to move GEO forward in delivering decision-support tools and services to users. The Goals cut across the work being done in the Flagships, Initiatives and Foundational Tasks and so actions to advance the Goals must connect to and serve these activities. Ultimately, GEO's success lies in delivering products and services to end users. However, the process of developing these products and services takes considerable time to put in place and it may not be possible to track changes at this level in the course

of one year. Using the Goals and Objectives is expected to support the work of the Flagships and Initiatives and will help Executive Committee, the Secretariat and Programme Board to stay on message, balance actions, remain focused, and to monitor and assess progress.

Given that this presentation was intended as a lead-in to agenda item 2.3, the Lead Co-Chair proposed that discussion be deferred until after the following presentation.

2.3 Secretariat Work Planning (Document 43.7 – for discussion)

Mr Craig Larlee, GEO Monitoring and Evaluation Officer, presented an overview of a new process that has been implemented within the Secretariat to manage work tasks, align staff and other resources to the Executive Committee Goals and Objectives, and support reporting to Executive Committee on the achievement of the Objectives. For each Objective established by the Executive Committee for 2018, a set of Tasks necessary to support achievement of the Objective have been identified by the Secretariat. For each Task, further information has been specified, including the expected outcome, expected completion data, travel requirements, etc. Reporting on progress toward the achievement of the Objectives was proposed to occur at the 44th and 45th Executive Committee meetings. This reporting would largely be qualitative, although some quantitative metrics may be used to a limited extent where existing data are available. The intent is to keep the monitoring process light and minimally burdensome. The example of the tasks under the Climate objective was provided to show the level of detail of disaggregation of Tasks and of reporting on results achieved.

Germany asked about whether Secretariat support to the Programme Board was included in the set of Tasks. It was also recommended that a “traffic light” approach of colour-coded reporting be used to provide a quick overview of status.

China asked whether it would be possible to add one or two quantitative indicators to describe progress.

The Lead Co-Chair also asked that some means be included in the reporting, even if qualitative, to track the performance against the Objectives. A question was asked regarding how significant gaps in resourcing would be addressed in the Secretariat Work Plan.

The Secretariat Director noted, in response to the request for quantification of progress, that the Secretariat receives the set of high-level Goals from the Executive Committee and identifies specific Tasks to support these Goals, but it is at the level of the Objectives where the Goals and the Tasks come together. She suggested that it may be worth looking again at whether the Objectives have been stated in a form that would allow for measurement and objective reporting of progress.

The United Kingdom noted that there were twenty-five Objectives, which may be more than required. It was also suggested that the Objective 5.1 be qualified or limited in some way, such as to raise resources to meet the defined budget. The Secretariat Director responded that the relevant reference point was to the Sustainable Minimum Budget that had been defined in 2016 and adjusted in 2017; the Objective should make reference to that.

The United States proposed that the Secretariat, as part of its planning exercise, identify areas of work that might be addressed through targeted “out-sourcing” of particular tasks to Members. The Secretariat Director noted that another option is for the Executive Committee to reduce the scope of work assigned to the Secretariat. This has already occurred to some degree, as the number of Foundational Tasks and the required resources to support them was reduced since they were originally defined; however, the level of resources from the Trust Fund is still insufficient to enable the Secretariat to adequately resource even this reduced set.

Finland suggested that consideration be given to the use of online social networking tools to enable GEO Members to support Secretariat activities and collaborate with others while doing so. Mr Steven Ramage announced that a Slack group was being set up to support GEO efforts related to the climate engagement priority and that others were welcome to participate.

Outcomes: The Executive Committee endorsed the proposed approach to Secretariat Work Planning, while noting the desirability of summarizing progress toward the Objectives using quantitative metrics, status categories or similar methods. Executive Committee also requested that the Secretariat review the Objectives with the aim of refocusing and reducing the current set.

Action 43.2: Secretariat to report on progress toward achievement of the Executive Committee Objectives. Secretariat to propose revisions to the Objectives to support assessment of progress and to reduce the total number. **Due: 44th Executive Committee meeting.**

3 IMPLEMENTING PRIORITIES

3.1 United Kingdom's Perspective on Resilience (Presentation by Nigel Clifford, Chief Executive Officer, Ordnance Survey)

Mr Clifford presented on the formation, activities and outcomes of the Natural Hazards Partnership (NHP). He described how 17 organizations within the United Kingdom government—representing key areas of national infrastructure and key agencies providing risk information—were brought together in 2011 under the coordination of the Civil Contingencies Secretariat in the Office of the Prime Minister. The mission of the NHP is to provide coordinated and coherent advice to civil contingency and emergency responders during high weather events and natural disasters. The NHP operates principally on a voluntary basis with little additional funding. The team members have largely remained in place since the NHP's formation and this has enabled the development of close working relationships among them.

The NHP delivers a series of documented pieces of advice. A Daily Hazard Assessment is published every afternoon that summarizes the current situation that day as well as a forward view over the next five days. The report goes to the central government and to local authorities and to local response and resilience fora that make decisions about, for example, school and road closures. A second product is a National Risk Register which provides an annual assessment of the likelihood and impact of a range of natural and human hazards. This product feeds a common information platform for the central government which supports emergency management, ensuring a common picture of what is happening on the ground that is used by all Ministers.

A relatively new area of work concerns the application of predictive models for forecasting impact of natural hazards; work is going on in at least three areas: wind, land movement, and flood. Different agencies are taking the lead in each of these areas and are combining their science with that of other agencies to produce predictive models, some of which are now being tested. The example of a flood hazard impact model was described.

Mr Clifford drew attention to another innovation which has been found to be useful, namely, the development of a clear and common view of what is meant by a “hazard”. Information products have been developed for a range of hazards that provide, in plain language, information that can be used by Ministers, the media, and people who may be impacted by the hazards.

In terms of where the NHP goes next, Mr Clifford acknowledged that the absence of designated funding may become an issue in future and so conversation has begun on how to address this. One possibility may be to involve commercial entities to a greater degree, many of whom, such as airports and utilities, have shown interest in the kind of information that the NHP has been producing. Another direction for future exploration is to increase the use of Earth observations, particularly remote sensed data, in the development of the operational information products.

The Secretariat Director thanked Mr Clifford, noting that it is his institution that is seconding Mr James Norris to the Secretariat to coordinate efforts on disaster resilience. She remarked that this is a good example of how a GEO Member is using a secondment to not only support GEO working at a global level but also to support its domestic priorities.

Finland noted that it also produces similar kinds of information, even at a global level to support citizens located outside the country. To produce such products for hazards outside their national boundaries they have found it necessary to use remote-sensed Earth observations.

Australia commented that they have been modelling impact of hazards for some time. This work requires bringing together Earth observations, statistical information, and other environmental information. These information requirements provide a key driver for Australia's engagement in the UN-GGIM, as this is a forum that brings together many of the required players. The difficulty of bringing new information during a crisis event was recognized, which is why Australia explains the use of new types of information to first responders during periods between crisis events so they are familiar with the products when the next crisis occurs. This preparation does require some investment, but this is needed to ensure that the products are used at the time of the events.

CEOS observed that the focus of the United Kingdom approach seemed to be on response during emergencies, although the trend in many places now is to move toward prevention and preparedness, since the potential savings are much greater than during response. The low usage of Earth observations in the NHP is common to many countries and demonstrates the need for the GEO community to work with the disaster management community, even if Earth observations is not a total solution.

Morocco asked whether there were mechanisms to share expertise and models with other countries. Mr Clifford responded that there is much information available on the web, but also that he could suggest referral to specific experts. He stated that he believes it is important to share experiences with other countries that are also dealing with challenges in responding to natural hazards.

Outcome: The Executive Committee thanked Mr Clifford for his informative and relevant presentation.

3.2 Implementing Priorities (Document 43.8 – for discussion)

Mr Steven Ramage, Senior External Relations Manager in the GEO Secretariat, presented a summary of key activities supporting the three GEO Engagement Priorities, focusing on actions where individual Executive Committee and other GEO Member country involvement and support would be most critical. These actions were described in the right-most column in the tables included in the presentation.

On the Climate Priority, GEO Members can support GEO's application for Observer status with UNFCCC and more broadly assist GEO in playing a role in the implementation of the Paris Agreement. Mr Ramage noted that the UNFCCC Secretariat has asked GEO to help with science communications, particularly in relation to the Nationally Determined Contributions and the National Adaptation Plans. GEO has also been asked to assist in the review of the IPCC's 2006 Guidelines, particularly in the use of Earth observations. As with the UNFCCC, Executive Committee Members can support inclusion of language in the IPCC Guidelines on use of Earth observations through their direct involvement with IPCC. GEO is engaging the climate science community through the Steering Committee of the GEO Carbon and GHG Initiative; it was noted that the first meeting was very positive. Executive Committee Members were asked to help review some of the documents emerging from that meeting. Finally, as GEO is now a Member of the Global Framework on Climate Services (GFCS) Partner Advisory Committee, GEO Members can help enable GEO to make best use of this opportunity.

Turning to disaster risk reduction, Executive Committee Members were asked to provide information about their national or regional activities related to disaster risk reduction, such as those presented in the previous item by the United Kingdom, to inform the Programme Board analysis of these activities across the GEO Work Programme. GEO is also working closely with the UNISDR to identify parts of the Sendai Framework that Earth observations would be most useful in supporting; Executive Committee Members were asked to support this engagement through their national involvement with UNISDR.

On Sustainable Development Goals (SDGs), Mr Ramage referred to engagement by several GEO Members at the meeting of the UN Statistical Commission to promote the integration of Earth observations with socio-economic data, particularly in monitoring and reporting against the SDGs. GEO Members, particularly through their statistical offices can assist in supporting efforts to have Earth observations recognized as a key part of the United Nations statistical framework. The next step for the Earth Observations for SDGs Initiative (EO4SDG) will be to work with national statistical offices and other ministries to identify operational examples of use of Earth observations within specific countries. This is also related to work with the Global Partnership for Sustainable Development Data (GPSDD) where GEO Members can support the development of joint products on the use of Earth observations data in national pilot projects.

One of GEO's emerging priorities is urban resilience. In this context, the New Urban Agenda (NUA), which looks improving how cities are planned and managed to improve quality of life of their citizens, is coming to be seen as a key policy driver. An attractive feature of the New Urban Agenda for GEO is that it brings together the three Engagement Priorities (SDGs, climate, and disaster resilience) in one place. UN Habitat, the lead agency for the NUA, has expressed interest in working with GEO to identify how Earth observations can be used to support this policy direction.

Mr Ramage then described a series of key events in the first seven months of 2018 that support one or more of the Engagement Priorities. He stated that it would be very helpful for GEO Members to represent GEO at some of these events. The Secretariat can provide briefings and presentation materials to assist Member representatives attending these events.

CEOS asked whether the latest Earth observations Handbook produced by CEOS was available for distribution to the UN Statistical Commission meeting. Mr Ramage responded that print copies were handed out at the meeting.

South Africa complemented the Secretariat for its engagement efforts with international organizations. It was noted that Mr Ramage had indicated that linkages back to national systems was not always fully successful. While some statistical offices some Members have good connections but this is not universal. It was asked whether GEO can take a more formal approach to this.

The European Commission asked whether it was worth considering engagement at the Second Arctic Science Ministerial, which will be held this year in Finland. GEO has been invited to the science meeting preceding the Ministerial. Decisions by Ministers might be important for advancing the proposal by Sustaining Arctic Observing Networks (SAON) to create an Arctic GEOSS Initiative.

Morocco asked that while there is a lot of work directed to engaging global agencies, is there also efforts to reach end users within Member countries? Also, how can this information be adapted and transmitted to Members to facilitate actions by GEO Principals? Mr Ramage gave the example of a joint letter that was sent by the Secretariat and the UN-GGIM requesting GEO Principals to engage with the head of their national statistical agency regarding SDGs. The challenge in doing this more frequently is due to the global scope of these efforts and so much of the outreach that occurs is targeted. He also indicated the openness of the Secretariat to other ideas for sharing information. Regional GEOSSes may be able to assist in engaging Members. The Secretariat is also using the GEO blog, bulletin, newsletter, etc. and it would be useful to understand which methods of contact work best for Members.

Finland added that SAON is planning to propose at the upcoming Arctic Science Ministerial that a position be created within the GEO Secretariat to coordinate the development of an Arctic GEOSS and for support to cold regions activities more generally. The European Commission added that the Arctic Observing Summit in Davos, Switzerland to which GEO has been invited.

China highlighted that in 19-21 November 2018 China will host the United Nations World Geospatial Information Congress. GEO would be welcome to organize a side event at the Congress.

Outcome: The Executive Committee took note of the engagement efforts that have been undertaken by the Secretariat in collaboration with GEO Members and Participating Organizations, and of those activities planned for the upcoming year. Executive Committee also requested that additional details be provided for the actions where Executive Committee Member engagement was being requested.

Action 43.3: Secretariat to provide more specific language and contact points to support Executive Committee actions on the Engagement Priorities. **Due: 44th Executive Committee meeting.**

3.3 Commercial Sector Engagement (Document 43.9 – for discussion)

Mr Ramage spoke to this item as well. He noted that Executive Committee, at its previous meeting, agreed that the next steps would be to: examine successful examples of partnerships, identify initial opportunities for collaboration, consider how open and commercial data have been successfully integrated, and how to continue the dialogue with the commercial sector at the executive level.

On the first point, Mr Ramage described six examples of partnering with the commercial sector that have been used by other international, governmental, or non-governmental organizations. Of these examples, the Executive Business Forum, Innovation Hub, and Expo/Trade Show approaches were identified as the ones that the Secretariat is planning to implement.

Regarding opportunities for practical collaboration, Mr Ramage described a proposal from some commercial organizations following the 2017 roundtable discussion for collaboration on addressing resilience challenges in Small Island Developing States. A pilot in the Caribbean is being developed as a proof of concept for this approach. The Secretariat is also working with Acclimatise on developing an education and awareness raising activity on Earth observations for financial institutions in relation to analysis of investments, particularly as these may be impacted by climate change. A third initiative is the possible development of a continent-wide data cube (Digital Earth Africa), in collaboration with CEOS, the World Economic Forum, the World Bank and other partners. Australia added that this project is building on current work by CEOS to prototype data cubes in five African countries. This new proposal would operationalize a data cube for Africa that would produce products and services related to water, agriculture, urban development and other issues. The capability to operate the infrastructure would be built and maintained within Africa.

With respect to commercial data integration, Mr Ramage noted that a number of key commercial data catalogues are already included in the GEOSS Platform, and individual Flagships, Initiatives and Community Activities have, to varying degrees, incorporated commercial sector data into their efforts. He also noted the important role of Programme Board in working with the commercial sector, for example, the identification of activities where additional commercial sector involvement would be beneficial.

South Africa stated that the African data cube project is an excellent way to demonstrate the value of GEO to its Members and that they are very supportive of this work. It was also noted that the project emerged from a discussion at the 2017 AfriGEOSS Symposium.

Finland indicated support for most of the proposals, although some concern was expressed regarding invitations to GEO events. It was suggested that such involvement could begin first at regional levels.

Japan agreed that cooperation with the commercial sector is important and noted that the 2018 Plenary will propose side events to encourage such collaboration.

The United Kingdom stated that they were pleased to see the proposals, especially that they are becoming practical now and not just ideas. It was observed that the Asian Development Bank has expressed interest in data cubes and their potential impacts for economic development of small- and medium-sized enterprises (SMEs). This suggests that there may be potential in Asia for a similar project to that in Africa.

China supported all of the proposed measures presented. On the Africa project, more information was requested since China has satellite data that it would be interested in contributing to the project.

Germany stated that while collaboration with the private sector is important, it is not easy. The proposals were generally acceptable, but requested more details on the innovation hub concept. The United States replied that the idea behind the innovation hub would be to bring together SMEs interested in using data from the GEO community to develop potential applications for specific challenges in a designated region. Through their participation, the SMEs could develop their capabilities. The challenge for GEO will be to identify a specific region in which to test the approach, which would require working with, for example, the regional Caucus to identify key needs that would form the call to interested firms to participate. It may require some initial investment by the host Member to set up this initiative. South Africa added that the concept is similar to a recent initiative in Africa called the “innovation challenge”, where agencies with data holdings would, together with commercial sector partners, issue a challenge for development of innovative applications around specific issues. South Africa observed that this was a useful exercise and that some good ideas came out of it, particularly from small start-up companies.

Outcome: The Executive Committee endorsed the proposed approach on implementing engagement with the commercial sector.

Action 43.4: Secretariat, with South Africa and Australia, to provide Executive Committee with an update on the Digital Earth Africa project. **Due: 44th Executive Committee meeting.**

Action 43.5: Secretariat to provide Executive Committee with information on current commercial sector involvement in the GEO Work Programme. **Due: 44th Executive Committee meeting.**

4 FINANCE AND RESOURCE MOBILIZATION

4.1 Report of the Budget Working Group (Document 43.10 – for information; Document 43.11 – for information)

Mr Stuart Minchin (Australia) presented the report on behalf of the Budget Working Group. It was noted that there had been a revision to the Interim Report on Income and Expenditure after the preparation of the Report of the Budget Working Group and the latter had not been revised. It was noted that the United States contribution as shown in the report was reduced due to advice from the GEO auditors that the contribution would be recorded against the 2017 fiscal year. This reduced the deficit for 2017 to CHF 73,000 and thus created only a modest draw against the Working Capital Fund. This showed that the Secretariat did a good job in managing its expenditures in response to the reduction in income that occurred late in the year.

Regarding the 2018 Budget document, it was recalled that Executive Committee had requested at its previous meeting that the amounts of contributions pledged and received were to be shown in comparison to the GEO indicative scale. Mr Minchin drew attention to the indicative scale amount shown in the table for the European Commission, which represents the total indicative scale amounts for all European Union countries. Since the current Commission contribution is less than this amount, the difference has then been allocated back to the individual countries and it is this reduced figure which is shown as the indicative scale contributions for each European Union GEO Member. Mr Minchin also noted that the document revisions reflect new contributions received from some Members, as well as the movement of the contribution from the United States that was moved to 2017, as described earlier.

Another new feature of the reporting in this Budget is to show certain contributions to the Trust Fund as “extra-budgetary” if these contributions are intended by the GEO Member to be applied to certain activities, where these activities are outside the activities that have been identified as core activities of the Secretariat. It was noted that while such contributions are also welcome, they do constrain the Secretariat’s ability to manage resources.

Mr Minchin referred to a graph in the document showing the timing of receipt of contributions in the Trust Fund. Most contributions have come into the Trust Fund late in the year which makes it difficult to expend resources at the beginning of the year when the total is uncertain. He also noted, regarding the projected income and expenditures, that the amounts have been adjusted to reflect changes in the pledged contributions. Although a small deficit is currently projected, the Secretariat will continue to manage expenses carefully through the year.

The Lead Co-Chair recognized the Executive Committee Members who were currently contributing at or above 100% of the indicative scale: Australia, Armenia, Germany and South Africa.

The European Commission stated that they were not comfortable with using the indicative scale in these kind of accounts. Contributions to the GEOSS Platform totalling € 1.5M, for example, are not included in the Commission contribution. Perhaps a side budget could be prepared that includes these other contributions to Foundational Tasks that would not otherwise occur in the absence of GEO. It was also suggested that the term “extra-budgetary” be changed to “conditional”. The Commission also remarked that their contribution to GEO comes from a fund to which some countries outside the European Union also contribute.

The United Kingdom noted that their contribution did not reflect the value of their virtual secondment.

Japan indicated that it would send its contribution for 2018 as soon as possible. It also noted that it sends a secondment to the Secretariat and that it is hosting the 2018 Plenary and that these contributions should be reflected somehow.

The Republic of Korea stated that it is looking to increase its contribution but that the amount will remain the same for 2018 as in 2017.

Mr Minchin responded that it was important to separate Trust Fund contributions from contributions to the Work Programme, although there may need to be a way to recognize contributions to Foundational Tasks. Regarding contributions that are combined from multiple countries, the Budget Working Group will work with those Members to determine how best to show their contributions. It was noted that this does have an impact on other Members as it affects their indicative scale amounts. He also noted that accounting standards require that secondments be recognized at standard United Nations budget costs, which may not reflect the value of the positions to the community. It was also noted that, while contributions to non-core activities is important, these may take the Secretariat away from fulfilling its core roles.

China observed that the budget is very limited and that they intend to contribute more in the future. China is also providing support to the participation of developing countries through Asia-Oceania GEOSS. It also intends support Chinese staff working in the Secretariat.

Armenia pointed out that it is contributing to the Horizon 2020 budget and thus their portion of the European Commission contribution should be recognized in the document. Mr Minchin responded that the European Members should advise the Budget Working Group as to how their contribution should be shown.

Outcomes: The Executive Committee took note of the Reports. The Budget Working Group was asked to consider:

- Methods to account for both cash and in-kind contributions to the core functions of the Trust Fund as compared to the contributions to the Work programme in financial reporting;
- Ways to encourage non-contributing Members to contribute to the Trust Fund; and
- Ways to recognize Members that are contributing at or above 100% of their indicative scale amount.

Action 43.6: The Budget Working Group to report to Executive Committee on their proposals for accounting for both cash and in-kind contributions to the core functions of the Trust Fund as compared to the contributions to the Work programme in the financial reports, in addition, to ways to recognize Members contributing at or above 100% and actions taken to encourage non-contributing Members to contribute to the Trust Fund. **Due: 44th Executive Committee meeting.**

4.2 Resource Mobilization (Document 43.12 – for discussion)

The Secretariat Director presented the document, noting that the issue was initiated by the previous Lead Co-Chair. The objectives of this activity are to: increase cash contributions to the Trust Fund, obtain targeted resources (cash or secondments) to support specific activities; and identify other options to mobilize resources.

Referring to the first graph in the presentation, Ms Ryan drew attention to the potential impact if all Executive Committee Members were to contribute at 100% of their indicative scale amount (or more if already contributing over this amount). This would be sufficient to resource most of the identified gaps in Secretariat capacity. She then went on to discuss the specific staffing gaps in Secretariat Management, Coordination of Foundational Tasks, and Support to Engagement Priorities.

The Lead Co-Chair asked whether any of the identified staffing gaps could be filled by virtual secondments. The Secretariat Director responded that the Secretariat Management positions were not good candidates for this, but that some other roles, such as on User Needs or Capacity Building, could be virtual if the secondment was of a senior-level person who was already familiar with the issues and the players within GEO.

The Secretariat Director continued with a discussion regarding strengthening the GEO Membership base. In particular, the importance of engaging Member country agencies working on international development was highlighted. Several ideas for external fundraising were also described, although the Director cautioned that it was unlikely that these ideas would lead to significant resources in the near future.

The Lead Co-Chair suggested that Executive Committee consider the idea of “pay-to-play”, that is, that Members would need to contribute to the Trust Fund, though not necessarily at the full indicative scale amount, to become Members of Executive Committee.

Finland noted that the remaining amount after the European Commission contribution was reflected was relatively small and so it should be possible to meet the scale amount. On fundraising, it was suggested that consideration be given to engaging a professional fundraising organization, which would implement the activities in return for a percentage of the contributions. This would be better than using Secretariat staff for this purpose.

Australia noted that this is an issue of Executive Committee leadership. While there is no requirement for GEO Members to contribute financially, Executive Committee Membership is a privilege that goes beyond ordinary Membership. Every Executive Committee Member should be expected to make some contribution, even a small one. There should also be some formal recognition of those countries that contribute at 100% of the indicative scale or more; it should be a status that countries aspire to.

South Africa noted that the use of the indicative scale is a good approach and that GEO should not be discouraged by lack of much response to date. The greatest responsibility in GEO is with Executive Committee Members and so it is difficult to ask other Members to contribute if Executive Committee Members are not themselves willing to do so.

The European Commission stated that there is a need to enlarge the discussion, that it shouldn't be based on the CHF 5.1M budget. Perhaps GEO should consider delegation of some tasks, for example, the GEOSS Platform. Having some tasks done outside of the Secretariat might strengthen GEO.

Germany agreed with the European Commission and stated that while it was good to try to increase contributions, this may not happen. It is necessary, therefore, to identify other options, a “Plan B”. For

example, it is easier for Members to support a virtual secondment than to send cash to support a position at the Secretariat.

The United Kingdom remarked that it is not clear how the budget relates to secondments and different ways of working. It is also not clear that the sustainable minimum budget is truly minimum. GEO needs to clarify its messaging back to countries, as many are making substantial contributions through the Work Programme.

The Lead Co-Chair noted that the “Plan B” is to use virtual secondments, fundraising and so on. If task responsibilities are clearly identified, it may be possible for Members to find a way to provide in-kind resources.

The Secretariat Director noted that with each level of stature within GEO (i.e., Executive Committee, Co-Chair), additional responsibilities should follow. She also noted that the indicative scale recognizes the ability to pay of each Member, thus creating a fair comparison. With respect to the sustainable minimum budget, it was noted that this was not hypothetical, but was based on detailed analysis which was since scaled back from the original design of the Implementation Planning Working Group.

The Lead Co-Chair asked Executive Committee Members whether a proposal should be taken to Plenary that would require Executive Committee Members to contribute to the Trust Fund.

Australia agreed, but suggested that this proposal should proceed to Plenary even in the absence of consensus from Executive Committee as there is an issue of potential self-interest.

South Africa supported the proposal to Plenary.

The United Kingdom asked that the proposal should ensure that it doesn't create any perverse incentives for participation in Executive Committee.

The Lead Co-Chair agreed that care is needed around the messaging. It was also noted that it would be important to recognize other types of contributions, including hosting Plenary, supporting regional activities, or contributing to the Work Programme. While virtual secondments may not be included as part of the Trust Fund, these would also need to be valued.

Outcomes: The Executive Committee:

- Urged its Members to lead by example;
- Requested the Secretariat to plan for alternative approaches in the event that the minimum sustainable budget amount is not reached;
- Requested the Secretariat, in consultation with the Budget Working Group, to propose changes to the Rules of Procedure for Plenary decision regarding the expectation on Executive Committee Members to contribute to the Trust Fund;
- Supported the initiative of some Executive Committee Members to present a proposal to the Arctic Science Ministerial regarding a secondment to address cold regions activities; and
- Agreed that the Secretariat should proceed with implementation of fundraising.

Action 43.7: Secretariat, in consultation with the Budget Working Group, to propose changes to the Rules of Procedure for Plenary decision regarding the expectation on Executive Committee Members to contribute to the Trust Fund. **Due: 44th Executive Committee meeting.**

Action 43.8: Secretariat to provide position descriptions and expectations (e.g., travel to Geneva and Plenary) related to staffing gaps that could be filled by secondments. **Due: 30 April 2018.**

Meeting adjourned at 17:35

Friday, 9 March 2018

Meeting reconvened at 09:00

5 2017-2019 GEO WORK PROGRAMME

5.1 Report from the Programme Board (Document 43.13 – for information)

Ivan Petiteville (ESA) presented the Report on behalf of the Programme Board Co-Chairs. He began by highlighting two requests from Programme Board to the Executive Committee, namely, 1) that Executive Committee Member provide political support through their respective governments to ensure uptake of Earth observations through GEO in reporting on their commitments regarding the GEO Engagement Priorities (i.e., on SDGs, Paris Agreement, and Sendai Framework) and 2) that Executive Committee take note of, and respond to, the dwindling expert secondments to the Secretariat for support of Foundational Tasks, including for GEOSS In-Situ Earth Observation Resources, Capacity Building Coordination, and User Needs and Gap Analysis.

Mr Petiteville then presented an overview of the 8th Programme Board meeting that took place 31 January–1 February 2018. He drew attention to the ongoing Programme Board Subgroup work on alignment of the Work Programme with the Paris Agreement and on outreach to the regional GEOSS Initiatives. Three new Sub-groups were formed during the meeting: one addressing Work Programme alignment to the Sendai Framework, a second dealing with Work Programme Monitoring, and the third on Sustainable Earth Observations. Mr Petiteville then noted that the Programme Board adopted a more flexible process for reviewing proposals for new Initiatives and Flagships through the year rather than reviewing all applications at one time. He remarked that two proposals have been received, these dealing with Land Degradation Neutrality and the creation of an Arctic GEOSS. These have been accepted as Community Activities to allow work to begin while their applications to be recognized as Initiatives are reviewed. Other applications may be accepted for review until 15 August, after which there will not be sufficient time to complete the review process before Plenary documents will need to be distributed.

The Programme Board also discussed the results of a survey of the GEO community regarding a GEO Symposium in 2018 which showed strong interest. Programme Board endorsed holding a Symposium and recommended a number of potential topics and proposed that it be held on the 11-12 June in Geneva.

Germany stated that they appreciated the work of Programme Board and endorsed the new Subgroups, although some doubts were expressed regarding some Symposium topics as it was felt that Plenary was a better venue for strategic discussions. It was also noted that some Programme Board documents were distributed late.

The United Kingdom commented that they have been working on the integration of satellite and in-situ data and recognized that this is can be very challenging and the issues are often specific to different domains. Interest was expressed on being involved in the work of this Subgroup.

Mr Petiteville responded that the coordination of satellite observations was well in hand through the work of CEOS, but the in-situ world is much more diverse, with many different stakeholders. Many of these groups are used to working autonomously in their domains. The focus for GEO is on complementarity, that is, finding ways in which satellite data can address gaps in in-situ data and vice-versa. Also, there is the role of in-situ data in verification of remote-sensed data. He also agreed with the point by Germany regarding the role of Plenary in strategic discussions, observing that the Programme Board focus is on the technical and programmatic questions. He noted that the Secretariat is leading on the overall planning for the Symposium.

Finland added that modelling can also help to address gaps in data; this should be considered by the Subgroup. Given the scope of the issue, it will also be necessary to focus on specific domains. GEO Carbon and GHG Initiative is doing this for the carbon cycle and other Work Programme activities are doing this within their particular domains or applications. Once there is enough of this kind of activity within the Work Programme, it may be possible to draw the linkages between them.

Australia stated that in-situ observations do not always need to have a comprehensive vision, as they are often tied to particular purposes. It will be necessary to bring together assimilation, modelling, etc. to feed the production of specific products. It should not be GEO's intention to coordinate all in-situ observations. It was noted that many products from Geoscience Australia involve both satellite and in-situ observations, for example, the data cube connects water observations from space with the stream gauge network. This enables turning flood warnings, traditionally done by the water service, from the height of a particular stream gauge into information about the footprint of the flood, thereby reflecting the impact on citizens. GEO needs to think increasingly about integrating in-situ data feeds, but this does not require organizing all in-situ data before moving forward.

Mr Petiteville responded that GEO will certainly need to proceed domain by domain or by specific applications. It is also important to connect this work to particular user needs, as the focus is not on the data itself but how it can be used to serve user needs. If an expert coordinator becomes available in the Secretariat, that person will still need to approach this the same way, domain by domain.

CEOS added that the proof of the approach should be by showcasing specific projects where this can be done. For example, one idea might be a project on the water cycle in the Mekong river basin, although this would require new funding to implement.

IEEE noted that the commercial sector is very interested in in-situ data. They would be in a position to produce products if the data were available and properly tagged. This work requires the involvement of data scientists, not just natural scientists.

Finland agreed, but insisted that GEO can help with this, referring to a project in Europe on in-situ stations. It was observed that scientists are often hesitant to release data quickly because of their need to publish papers based on the data. Also, the commercial sector may not be able to develop applications based on research data which may not be sustained over the longer term. GEO should make these issues better known.

The European Commission stated that the EuroGEOSS Initiative is looking at how to sustain research data. There is also greater potential in using data already available through the GEOSS Platform in applications.

CEOS noted that data publication is becoming more common and there is more recognition of those who collect the data. GEO should find ways to give more credit to those collecting the data and not just those writing scientific papers on it.

Mr Petiteville noted that there is a large volume of Copernicus data that is not being fully exploited. There is a need for new techniques to process data, for example, artificial intelligence methods, to support near-real time applications, such as after disasters. GEO should create opportunities for the commercial sector to come forward with new ideas.

The Lead Co-Chair asked for clarification of the terms of reference for the Subgroup on regional GEOSSes, noting that these differed from other Initiatives. Mr Petiteville responded that there is a perception that they are relatively autonomous and do not have much visibility outside their regions or contacts with other Work Programme activities. There is a need to ensure synergy with the rest of the Work Programme and exchange of experience and outcomes between the regions. The Subgroup will assess the current alignment and make recommendations on how to improve it.

Finland noted that some degree of difference between regions should be allowed, but there should also be reporting back to GEO as a whole. The exercise undertaken by the Programme Board was seen as useful.

South Africa stated, as a coordinator of a regional GEOSS and as a co-chair of the Subgroup, that the intention was to bring a light touch to the review. There is a desire to provide pathways for communication between regional GEOSSes and to the broader GEO community.

The European Commission commented they are currently putting together the EuroGEOSS Initiative, which is intended to structure the European contribution to GEO and to harvest the benefits of GEOSS. EuroGEOSS is following GEO guidance and is aligning to the Engagement Priorities. The niche for EuroGEOSS is viewed as the downstream end, to help in reaching specific user communities.

CEOS mentioned that they had raised a concern at Programme Board regarding the criteria for regional GEOSSes, noting that there are now four continental GEOSSes, two or three regional, and potentially thematic, e.g. Arctic. Perhaps the issue is simply one of nomenclature.

Outcomes: The Executive Committee took note of the Programme Board report. Executive Committee also recognized the important roles of Regional GEOSS Initiatives and welcomed the efforts by Programme Board to provide additional guidance to these Initiatives and to identify synergies among them and with the rest of the Work Programme.

Action 43.9: Roles and expectations for Regional GEOSS Initiatives to be discussed at Executive Committee. **Due: 44th Executive Committee meeting.**

Action 43.10: Programme Board requested to recognize the differences between global thematic and regional / sub-regional Initiatives. **Due: 45th Executive Committee meeting.**

6 GEO PLENARIES AND MINISTERIAL

6.1 GEO Plenaries and Ministerial (Document 43.14 – for discussion)

Mr Craig Larlee began the presentation by explaining a graph summarizing the ratings by participants of each session at the GEO-XIV Plenary. He noted that satisfaction was generally quite high, with between 30 to 50% of participants indicating that they found the sessions very relevant and useful and were very satisfied with the session overall. Total satisfaction ratings for most sessions was in the range of 70 to 80%, with the exception of session two which dealt with Earth observations in public policy. He referred Executive Committee Members to the full survey report for more details, noting that the survey findings had been provided to the GEO-XV Plenary Working Group which had taken them into account in their planning.

Finland observed that the overall message was that satisfaction was strong. The issue with session two may have reflected the moderation rather than the content. Organizers of the next Plenary were encouraged to think about how the sessions should flow.

Australia noted that the key finding was that there were not enough decisions at Plenary. Panel moderators should distil the discussion to lead to a decision or recommendation. These recommendations should then form the basis for groundwork that would be brought to the next Plenary. Plenary should be set up as a series of substantive topic on which Plenary can engage.

The United Kingdom stated that the slide and the report were very useful. From a personal perspective, it was noted that only two members of the panel on which the speaker was involved participated in the pre-meeting. The comments from Finland and Australia were endorsed.

Japan took the floor to give the next section of the presentation, noting the key lessons taken by the GEO-XV Working Group from the experience in 2017. In particular, the next Plenary will be more concerned with decision making and interaction with Plenary participants; communication around the objectives, discussion and outcomes of panels will be sharpened; and communications tools will be used more effectively. Japan confirmed that the GEO Week 2018 will be held in Kyoto, Japan on 29 October to 2 November. The general theme this year will focus on regional efforts (all regional

GEOSSEs) and on the international agenda related to resilience and sustainability. Two options for GEO Week 2018 slogans were presented. The organization of the panel sessions was described, as well as the arrangements for the exhibition, which will include for the first time a space for smaller booths to support business matching. Side event rooms are proposed to be organized by theme to avoid concurrent sessions on the same theme.

Germany noted the feedback on the GEO-XIV Plenary that there were too many panel sessions and they were too long. It was recognized that there would be only three panels this year and they would be led off by a keynote address. It was recommended that the speakers be from the international organizations representing the policy drivers for GEO's Engagement Priorities and hoped that they would be able to clearly state what they expect from GEO.

South Africa thanked Japan for their preparations for the Plenary and indicated that they were pleased with general focus. The suggestion raised earlier by Australia concerning the need for decisions or recommendations from the panels was endorsed, as this would improve engagement by GEO Members. It was also suggested that lessons be taken from the positive results with the side events in 2017.

The European Commission noted that they are participating on the Working Group for GEO Week 2018 and are pleased with the directions of the planning. It was recommended to continue the practice of involving end users on the panels in an effort to continue to reach and engage users. The Commission also indicated their agreement with the point by Australia that Plenary should maintain its decision making role.

The Republic of Korea stated that they appreciated Japan's efforts and supported the focus on regional efforts. In particular, Korea wished to encourage participation from the Asia-Oceania region.

The Lead Co-Chair asked how the two Plenary themes would be integrated. Japan responded that regional GEOSSE members would be included on the panels and could use the opportunity to showcase regional capabilities. Keynote speakers would be from United Nations agencies and would speak to their concerns and challenges regarding resilience and sustainability.

Ms Patricia Geddes then spoke to the final part of the presentation dealing with the timeline for a possible Ministerial meeting in 2019. She noted that the Mexico City Declaration included a resolution to reconvene in 2019. Based on the experience with previous Ministerials, it is recommended to begin soon. The host country should be announced at the next Executive Committee meeting, along with a call for nominations to a Ministerial Working Group. A list of Ministers to invite will need to be prepared based on input from GEO Principals. The process of inviting Ministers can also be used as a means for re-engaging Members. As it would be necessary to inform Ministers of the topics for discussion at the time of the invitations, it would be necessary to draft an agenda early. The drafting of the declaration should begin by January 2019.

Ecuador suggested that GEO should coordinate closely with the Permanent Missions in Geneva. This should be started early in the preparations and use more briefings than for previous Ministerials.

The European Commission stated that GEO needs a clear reason to bring Ministers to the event. While it was agreed that it is important to start the process early, the key question is whether the Ministerial should take place in 2019.

Ms Geddes agreed that it would be important to engage the Missions in Geneva. This will start with a briefing on the Kyoto Plenary this summer, in collaboration with the Japanese Mission. She agreed that it would be necessary to clearly identify the need for the Ministerial and suggested that the Secretariat could review the Mexico City Declaration and provide an update on the progress achieved against each of the resolutions.

Outcomes: The Executive Committee thanked the GEO Week 2018 Working Group for their efforts. Executive Committee requested the Working Group to consider the experiences with previous Plenary

panel sessions in their planning and emphasized that Plenary should remain an occasion for taking decisions.

Action 43.111: Secretariat to propose a substantial case and key messages that could form a basis for a 2019 Ministerial. **Due: 44th Executive Committee meeting.**

6.2 Mid-Term Evaluation (Document 43.15 – for decision)

Mr Craig Larlee presented the item, noting that the issue arose from the early consideration of a 2019 Ministerial and whether a Mid-Term Evaluation would be required to support the Ministerial. Since time required to conduct an evaluation requires beginning the process nearly two years in advance of the reporting date, it would be necessary to start the process soon if a report was to be presented at the 2019 Plenary or Ministerial. Mr Larlee reviewed the differences between progress reports, which are produced by the Secretariat for each Plenary, and evaluations, which are produced by an independent team. The 2016-2025 Strategic Plan recommended that the frequency of GEO evaluations be reduced to only two—a Mid-Term Evaluation and a Summative Evaluation—over the 10-year period of the Strategic Plan. The key issues for Executive Committee are thus the timing of the Mid-Term Evaluation and the focus or framework which would be used to guide the work of the evaluation team. On these questions, the Secretariat recommended that the Mid-Term Evaluation be planned for completion in 2020, as this would allow for more time for implementation of Work Programme activities, noting that evaluations were not typically presented to past Ministerials. Regarding the focus of the evaluation, the Secretariat recommended that the evaluation should seek to obtain feedback from a broad range of stakeholders in GEO, including information users at various levels, partner organizations, Work Programme participants, GEO Members and others. This approach has been used successfully by other organizations with similarities to GEO, including the GPSDD.

Germany suggested that the Secretariat recommendations to delay the evaluation to 2020 and to use a stakeholder perspective be adopted. Finland and Japan also agreed with the recommendations.

Morocco stated that the evaluation should look more broadly than just at the Work Programme.

The European Commission also supported the recommendations but emphasized that there would still be a need for a progress report in 2019.

The United Kingdom agreed with the recommendations, but specified that the stakeholder perspective approach must include the aspect of delivery of services.

The United States also indicated their agreement with the recommendations.

Outcome: The Executive Committee endorsed the recommendations to delay the completion of the Mid-Term Evaluation to 2020 and to use a stakeholder perspectives approach.

Action 43.12: Secretariat to present the scope and timing of the Mid-Term Evaluation to Plenary for approval. **Due: 45th Executive Committee meeting.**

7 PARTICIPATING ORGANIZATIONS

7.1 Participating Organizations (Document 43.16 – Part 1 for discussion; Part 2 for decision)

The Secretariat Director set the context for the strategy component, noting that the Secretariat has observed some differences of opinion in terms of the criteria used for evaluating the applications from candidate Participating Organizations. The discussion on the strategy is being presented first as the direction of that discussion may have impact on the later decisions regarding specific applications that have been received.

Mr Craig Larlee presented the strategy component of the document on behalf of the Secretariat. He began by explaining that the differences in interpretation of the criteria hinge on whether only organizations with an international mandate or scope, but not necessarily intergovernmental

organizations, are eligible to become Participating Organizations. This would affect how organizations whose mandate and scope are principally within a single country would be addressed, such as whether these organizations would be deemed to participate under the umbrella of their GEO Member country. It was noted that participation under the Member country does not imply participation on a national delegation to Plenary; while some GEO Members do invite non-governmental even commercial sector organizations to participate through their delegations, this participation would remain the prerogative of the GEO Principal to determine. It was also noted that other forms of participation in GEO, such as through the Work Programme, in side events or at the Symposium, does not depend on Participating Organization status. However, some organizations prefer to have official recognition of their affiliation with GEO and this may facilitate other engagement. This is particularly important as GEO seeks to engage more downstream (user) organizations that may not have the capability or understanding of GEO to engage immediately through the Work Programme. These organizations may also be seeking Participating Organization status to support networking and engagement with the GEO community through Plenary attendance. Several options for addressing the issues raised were presented, including clarifying the wording of the eligibility criteria for Participating Organizations, referring national and smaller-scale organizations to the GEO Principal for their country, encouraging regional Caucuses to engage non-governmental organizations in their activities, and to consider the creation of a new category of organizational relationship to GEO that would be broader than that of Participating Organization but which would involve a lesser role.

Australia commented that it was important to recognize that GEO is becoming more user-focused and most users are not international organizations. One way to deal with this may be to create a layer above the existing Participating Organization category for the truly international organizations and then give the current rights of Participating Organizations to this new category.

South Africa asked whether the issue was due to a large increase in the number of Participating Organizations. Even if not all organizations are contributing to GEO, they may still be benefiting. There may be a concern, however, that GEO could become dominated by Participating Organizations. GEO should consider creating a new category, especially given concerns with the size and lack of involvement of some organizations being admitted.

The European Commission agreed that a proliferation of Participating Organizations ought to be avoided. Relevance of the organizations should not be the only criterion. GEO should remain a primarily governmental organization and should be driven by governments. The Commission recommended that the current rules should be retained but need to be applied more stringently.

Finland stated that it was good to put this issue on the table, but it can't be solved by rules as there will always be borderline cases. The discussion should be kept at the level of principles. Numbers of Participating Organizations should not be allowed to grow without limit. A suggestion was made to apply a membership fee to Participating Organizations as both a means of raising funds and to limit number of applications.

Morocco indicated their support for continuing to maintain GEO as an inter-governmental organization. There should also be clear expectations for Participating Organizations in exchange for their membership.

Germany supported the position of the European Commission, that the current rules should be applied and that GEO should be kept as an inter-governmental organization.

China suggested that the rules used in other organizations should be examined.

Australia observed that this is a good problem to have, that organizations want to join our community. We can set rules to limit involvement, for example, to allow them to come to Plenary but not to make interventions. Our governments expect us to engage with the user community, but there are users who might not be able to pay a membership fee.

The United States agreed with Australia that this is a good problem to have, although it is important that only governments have votes. GEO can set the rules for participation, but it should also bring in others to contribute to its organization and mission. The United States stated that it believes that some changes are needed, perhaps to allow participation in regional meetings, symposia, but not Plenary, for example. However, closing the door to these organizations will limit GEO's growth of influence.

The Secretariat proposed a set of principles as a basis for discussion by Executive Committee following the lunch break. The principles were as follows:

- Recognize that GEO is predominantly an intergovernmental organization;
- Apply the more restrictive interpretation of PO eligibility, i.e. organizations that have a significant international dimension:
 - International to be interpreted as involving more than one country;
 - National associations of commercial sector firms to be eligible;
 - Remove reference to “regional”.
- Create a new category of GEO affiliation for national and sub-national non-governmental organizations, including commercial entities;
- Observer category to be limited to countries only;
- Changes to Rules of Procedure will be brought to ExCom 44 for approval and then sent to Plenary for decision.

Australia stated that the principles were heading in the right direction, but the devil is in details. For example, What are the rules for affiliates? What do we expect of Participating Organizations? The rules will need to be defined before Executive Committee can be completely comfortable. A concrete proposal, with options, should be developed, including expectations and rules. International organizations should also be allowed to become affiliates. Australia proposed that a Subgroup of Executive Committee be formed to prepare this proposal as a decision for Plenary.

South Africa noted that the definition of “regional” is fairly standard in intergovernmental organizations and so does not need to be removed, although it should be clear that it means international. Regarding eligibility of national associations of commercial sector firms, are they not able to come through their national delegations? For example, in the International Telecommunications Union, individual firms participate in discussions as part of their national delegations. On the new category of national and sub-national organizations, South Africa agrees with Australia that much depends on the detail of how it would be differentiated from current categories.

Argentina requested an assessment of how current Participating Organizations are participating, e.g. in the Work Programme.

The United Kingdom agreed that the proposed principles go in the right direction, but there should also be consideration of any resource implications for the Secretariat of these changes.

Germany agreed with Australia's proposal to create a Subgroup to look at this issue, noting that questions remain concerning the rights and obligations of the new category.

The European Commission suggested that a paper be developed on what the rights and obligations of the new category, clearly stating that these organizations would not have decision rights in GEO. Any consideration of a membership fee should pay attention to the possible impact on the applicant organizations.

The Lead Co-Chair stated that the proposal was a good path forward, though not ready for decision. What is needed is a well-articulated, well-defined statement for the new category. Even if a consensus is not reached at Executive Committee, the matter should still go to Plenary. Writing of the paper should be assigned to a Subgroup of Executive Committee and not just to the Secretariat.

Outcome: The Executive Committee created a Subgroup to: explore modifications to the eligibility criteria for recognition as a GEO Participating Organization; identify options for a new category of affiliated organizations; and to examine the potential for a membership fee or other contribution to the Trust Fund from Participating Organizations and/or affiliated organizations.

Action 43.13: Subgroup to produce a white paper with proposals for modifications to the eligibility criteria for recognition as a GEO Participating Organization; options for a new category or affiliated organizations; and proposal for a membership fee and/or contribution to the Trust Fund for consideration by Executive Committee, with a view to producing recommendations to the GEO-XV Plenary as a modification to the GEO Rules of Procedure. **Due: 44th Executive Committee meeting.**

The Executive Committee then reviewed the applications from candidate Participating Organizations.

Outcomes:

The Executive Committee approved the applications from:

- African Climate Change Research Centre (ACCREC);
- Asian Disaster Preparedness Center (ADPC);
- Afriterra Foundation;
- Centre for Environment and Development for the Arab Region and Europe (CEDARE);
- Environment Pulse Institute (EPI);
- IHE Delft Institute for Water Education;
- Radiant Earth; and
- Resources for the Future (RFF).

The Executive Committee did not approve the applications from:

- La Brique (ALB); and
- Community and Rural Education Society (CARES).

The Executive Committee deferred its decision, pending establishment of a potential GEO Affiliate category, for the applications from:

- AmericaView Inc.;
- Cyprus Remote Sensing Society (CRSS); and
- Sat-Drones LLC.

8 CONCLUSION

8.1 Review of Session Outcomes and Action Items

The Executive Committee reviewed and approved the list of meeting outcomes and new action items.

8.2 Closing Remarks

The Executive Committee thanked Ms Barbara Ryan for her contributions and dedication to GEO and to the Executive Committee during her time as Secretariat Director.

Meeting adjourned at 16:25.

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