

Draft Report of GEO-XII

11-12 November 2015

Mexico City, Mexico

Wednesday, 11 November 2015

Meeting convened at 09:00 at Hotel Hilton Reforma, Sala Don Alberto

1 OPENING SESSIONS

Chair: Rudolf Strohmeier, Deputy Director General, Directorate General for Research and Innovation, European Commission.

1.1 Welcome from the GEO Principal of Mexico

Rolando Ocampo, GEO Principal, Mexico, welcomed Plenary and noted the important elements of the Group on Earth Observations (GEO) that would be discussed during the meeting including activities such as GEO BON, GEOGLAM, GEONETCast, and others. He highlighted the launch of AmeriGEOSS, and expressed appreciation for the convergence of the GEO Plenary, UN Initiative on Global Geospatial Information Management (UN-GGIM) and the Latin American Geospatial Forum (LAGF). Mr Ocampo noted further that with the recent adoption of the UN 2030 Sustainable Development Agenda and the UNFCCC 21st Session of the Conference of the Parties (COP-21) occurring shortly after the Plenary, GEO has the chance to define priorities for the next decade that will serve societies across the Societal Benefit Areas. He stated that Mexico shares the principles and vision of GEO, and offers its experience to GEO in statistics and geospatial information, noting the importance of making information openly available in a timely fashion to benefit citizens. Mexico recently hosted a meeting of the Open Data Alliance whose mission is very much in line with GEO's Data Sharing Principles. He referenced the important documents that will be discussed by Plenary, including the *GEO Strategic Plan 2016-2025: Implementing GEOSS*, which will serve as a roadmap for GEO and the further implementation of GEOSS, and to broaden GEO's engagement with stakeholders. He thanked the several Working Groups, Executive Committee and Secretariat for making the meeting possible, and concluded by stating that Mexico is dedicated to the implementation of GEOSS, is very proud to host the meeting and wished everyone successful deliberations, and a pleasant visit to Mexico.

Co-Chair Opening Remarks

Co-Chair Jianlin Cao, People's Republic of China, expressed sincere gratitude to Mexico for hosting the GEO-XII Plenary, which is an important opportunity to review GEO's work and progress over the past year. He highlighted the anticipated adoption of the new Strategic Plan and the Ministerial Declaration, which will guide GEO for the next 10 years. Mr Cao noted the attendance at Plenary of representatives of 14 Ministries from China, and that China and Asia overall have made great progress in establishing Earth observation infrastructures and responding to disasters, such as the drought and earthquake in Nepal, and have played an important role in expanding GEOSS in this region. China is making significant progress in GEO, developing comprehensive plans for land, sea and air Earth observations and charting a course for the next decade. China will draft a GEO strategic research plan for the next decade, including monitoring ecosystems, and is prepared to share remote sensing data with all countries. He invited all participants to visit the China exhibition.

Co-Chair Kathryn Sullivan, United States of America, thanked Mexico for hosting the Plenary and the various events of the week, and appreciated co-locating the Plenary with the LAGF. She noted that Plenary is the launch of GEO into a new decade. Ten years ago, GEO's founders had a vision for building GEOSS and, although we did not know exactly what that meant at time, the concept of sharing Earth observations on a global scale was a radical idea. There was no operating manual, no Rules of Procedure, but everyone knew this would be key to serving society. This idea powered GEO through its first decade; always taking care to operate under only a light and flexible framework. These factors were key ingredients to GEO's success and made GEO more inclined to action and dedicated to purpose. She noted that the Ministers have asked GEO to continue, produce real impacts and acknowledged that everyone in the room is committed to that objective. However, GEO faces new challenges as older organizations tend to shift away from the boldness of youth towards formalism, caution, and a greater degree of concern. This has been apparent in the crafting of the Ministerial Declaration and Programme Board. As we prepare to launch GEO's next decade, we need to be young again, be flexible, and focus on what we can do to best serve society, not whether we have perfect documents. We have written the right forward-looking ideas in the Strategic Plan. It is now up to us to put these ideas into action so that we can be proud of what we accomplish. None of us know what the future holds, but we do know with great assurance that there is an ever-increasing appetite for Earth observations. GEO has the capabilities to meet that need and demand which can enable us to leave a solid legacy that will propel GEO into its 3rd decade.

Co-Chair Philemon Mjwara, Republic of South Africa, thanked Mexico for the very warm reception and expressed a special welcome to new GEO Members Ecuador, Kenya, Somalia, Vietnam and Zimbabwe. He reflected that, over the past ten years, we have created a functional entity called GEO, as well as such activities as GEO BON, GEOGLAM, and others that have been great successes. The GEO Ministers still believe we are relevant and that was expressed in the 2014 Geneva Summit. Going forward, the landscape has changed. The Sustainable Development Goals (SDGs) now exist; the world requires solutions that cut across Societal Benefit Areas – for example, the Water-Energy-Food nexus. GEO also needs to adapt to changes in technology and remain relevant. The Strategic Plan will serve as a framework that will allow us to achieve our goals, and hope that the several evaluations that have taken place over the decade will provide lessons learned. He stated the mandate of delivering GEOSS continues and looked forward to another 10 years of GEO.

Co-Chair Rudolf Strohmeier, European Commission and Chair of the Session, thanked the other Co-Chairs for their thoughtful comments and also thanked Mexico, and INEGI in particular, for their generosity as host of the meeting. He noted that the European Commission has a long history with Mexico, including a recently concluded an economic partnership, political coordination and cooperation agreement. During an EU-Mexico summit in June, the two governments agreed that the European Union and Mexico should strengthen cooperation and share responsibility on issues of regional and global concern. Many of those issues were identified as critical to GEO, including climate change and the SDGs. To address these challenges requires comprehensive integrated Earth observations, data and information, including tools, to better understand the changes affecting our planet. The new Strategic Plan is an opportunity for GEO members to lead in the production of strategic intelligence required to cope with those issues.. The highest priority should be to engage more directly with stakeholders, particularly those from developing countries. The discussions on how the GEOSS initiatives, Flagships and Foundational Tasks will be implemented are crucial. We have to move towards a GEOSS that becomes a global reference for the provision of Earth observation data and information, and we have to make it work. Mr Strohmeier recalled the enthusiasm of the 3rd Earth Observation Summit in Brussels that helped to launch GEO, and expressed confidence that 10 years later GEO can find the same spirit and enthusiasm, and actually implement an even more ambitious and, user-friendly GEOSS to serve the needs of society and allow us to cope with the challenges faced by our planet.

Director Barbara Ryan, GEO Secretariat, welcomed Plenary and thanked Mexico for hosting all of the events of the week. She reviewed GEO's accomplishments during 2015, including the accession of five new Members; GEO's high-level engagement in global policy initiatives and forums (including the Sustainable Development Goals (SDGs), Global Partnership for Sustainable Development Data

(GPSDD), G7 Science Ministers, Eye on Earth Alliance and UNFCCC COP-21); and the growth in GEOSS assets (145 accessible data catalogues comprising more than 192 million discoverable and potentially accessible elements). She noted that GEO is a brokering infrastructure for Earth observations, similar to AirBnB (for lodging) and Uber (for rental cars) – organizations that do not themselves own any infrastructure; GEO is working to break down barriers for sharing Earth observations. Ms Ryan highlighted the GEO Secretariat Technical Staff and paid tribute to GEO community members who passed away during the year, including Leonard Hirsch of The Smithsonian Institution and USGEO. She closed by introducing a welcome video from Jane Goodall, renowned primatologist and UN Goodwill Ambassador.

(See: <http://www.earthobservations.org/documents.php?smid=2200&vid=16>)

1.2 Administrative Announcements

Barbara Ryan advised Plenary on the procedures for Plenary Statements and Ministerial Statements, noted the Twitter hashtag #GEOWeek15, and urged participants to vote in the video competition. (The winning videos are available at <http://www.earthobservations.org/geo12.php?smid=2100>)

1.3 Adoption of the Draft Agenda

Action: The Agenda was adopted with the modification proposed by the European Commission to consider Agenda Item 1.5 immediately following consideration of Agenda Item 7.

1.4 Recognition and Statements from New Members

The Chair stated that GEO had recently reached 100 Members with the Republic of Kenya. During 2015, the following countries became GEO Members:

- 96th Member: The Socialist Republic of Viet Nam, effective 11 November 2014;
- 97th Member: The Republic of Ecuador, effective 19 December 2014;
- 98th Member: The Republic of Zimbabwe, effective 12 May 2015;
- 99th Member: The Federal Republic of Somalia, effective 26 August 2015; and
- 100th Member: The Republic of Kenya, effective 8 October 2015.

The Chair invited Ecuador and Zimbabwe to make Statements (other new members being unable to attend the GEO-XII Plenary).

Ambassador Leonardo Arizaga, Ecuador, thanked Mexico for hosting the meeting and stated that it was an honor to join GEO after three years as an Observer. Ecuador recognized several years ago the importance of GEO and the role of information generated by coordinated, sustained Earth observations in sound decision-making, especially in setting policies to overcome economic challenges. Ecuador places particular emphasis on having sufficient resources for government agencies to provide pertinent, timely and reliable information and has established a research infrastructure to accomplish that objective. An essential element is for the country to invest in science, technology and innovation. Currently a new city of knowledge is being constructed; several thousand students have been sent abroad to obtain a higher education; and 2.2% of GDP is invested in education. Ecuador would like to congratulate GEO on its first decade of trying to ensure access to multiple sources of data, and transforming them into knowledge products and services for end users. The government encourages a particular focus by GEO on the needs of developing countries and looks forward to strengthening relationships across four specific Societal Benefit Areas: Agriculture and Food Security; Disaster Risk Reduction, Water Resources Management, and Biodiversity and Ecosystems. Ecuador enjoys great biodiversity, which is important to protect, and GEO can count on the country's collaboration.

Susan Muzite, Zimbabwe, thanked Plenary and the GEO community, stated how pleased the country is to join the GEO community, and hoped to be able to contribute to GEO across all the SBAs. Many issues, including agriculture, health, wildlife, transport, energy and disease are important matters for Zimbabwe. Government and business both desire to protect the country's resources, and the country looks forward to contributing to GEO.

1.5 Approval of the Draft GEO-XI Report

Outcome: The document was approved.

2 MEXICO CITY DRAFT DECLARATION

The Chair introduced the document and thanked the Ministerial Working Group (MWG) for its hard work to produce the document. Mexico requested that the Declaration be modified to include a reference to the welcoming of the recent adoption of the International Open Data Charter in paragraph 10, a modification which was supported by the GEO Executive Committee.

Outcome: The document was approved, with the modification proposed by Mexico.

3 MEXICO CITY MINISTERIAL SUMMIT OVERVIEW

Mexico City Ministerial Summit Programme

Outcome: The document was approved.

3.1 Mexico City Ministerial Summit Draft Agenda

The Chair introduced the document and noted the Executive Committee supported the development of questions to guide the Ministers' discussion under Ministerial Agenda Item 4.

Outcome: The document was approved.

4 GEOSS IMPLEMENTATION 2005-2015

4.1 Summary Assessment of Progress – Targets and Tasks

- Part I Target Assessment: Final Assessment of Progress against the GEOSS 2015 Strategic Targets;
- Part II Task Assessment: GEO 2012-2015 Work Plan Implementation Report.

Ivan DeLoatch, United States, presented the Assessment on behalf of the Institutions and Development Implementation Board (IDIB), the Infrastructure Implementation Board (IIB), and the Societal Benefits Implementation Board (SBIB). He outlined the Assessment process employed by all three Boards and noted that positive improvement has been made over the past four years, although several Strategic Targets could improve further. Lessons learned from the Assessment process include the need to: appropriately scope objectives; prioritize and align Work Plan Tasks; develop a coordination mechanism to support dependencies; ensure alignments and commitment of resources to ensure success; and develop annual measurements that facilitate prioritization and monitoring of objectives. The new Strategic Plan provides an improved structure that aligns with these lessons. Further, the assessment process improved over time; the color coding system was of mixed utility; and many tasks remain incomplete because of a lack of funding and time commitments from experts. The lessons and key recommendations have been incorporated into the Strategic Plan and 2016 Work Programme. Mr DeLoatch concluded by stating that the GEO community will need to work with the Programme Board to develop a more effective assessment and implementation process.

The Chair thanked all of the Boards for their contributions to GEO over the years. Switzerland voiced a concern as to whether all of the recommendations were incorporated into the Strategic Plan and Work Programme, especially since there is an indication of stagnation in the trend of improvement across many of the Strategic Targets. Mr DeLoatch responded that the Work Programme does reflect the recommendations and voiced the hope that the new Work Programme will create a paradigm shift in terms of commitments made by individuals and organizations to specific tasks and projects.

4.2 Report of the Sixth and Summative Evaluation of GEOSS Implementation

John Adamec, United States, presented the report, thanking the Evaluation Team and other contributors. The 6th Evaluation re-examined the major themes from the previous five evaluations, reviewing GEO documents and conducting a public survey and key interviews. The results were intended to inform the Implementation Plan Working Group's (IPWG's) development of the new Strategic Plan. Key findings included: affirmation of GEO's convening power; the need for measurable outcomes and improved internal and external communication; greater focus on *in situ* observations; and the integration of evaluations in all GEO activities.

The Chair thanked the Monitoring and Evaluation Working Group (M&E WG) for their hard work. China also expressed its appreciation for the M&E work, the importance of integrating monitoring and evaluation in the new Strategic Plan, and the important role of the Programme Board in this area. Japan noted the IPWG efforts to ensure M&E will be better integrated into the new management structure and Programme Board.

4.3 Lessons Learned from GEO's First Decade:

- Monitoring and Evaluation (M&E)

John Adamec, United States, presented the report, categorizing the lessons learned from the M&E process according to "achievement", "adversity" and "response". Overall, the evaluation process was successful, although there were too many evaluations conducted. Therefore, the recommendation is that two evaluations be conducted: Mid-term (2019) and End-term (2024). Further, recruiting for each Evaluation Team became more difficult over time, and the monitoring process can be too far removed from actual work programs to be of maximum value. The M&E WG recommended that the activity be embedded in the GEO Secretariat (monitoring) and the Programme Board (evaluation), which has been included in the Strategic Plan. In addition, measurement of Member/PO activities is not feasible; the Work Plan reporting process was cumbersome and incomplete, and more successful Tasks had unique measures of accomplishment. Recommendations were to build the M&E functions into each GEO activity, and that expectations be set according to the scope and maturity of a specific activity. He noted that the Strategic Plan includes such mechanisms. Additional lessons include the need to narrow targets and define measurable outcomes (new Core function results and indicators are addressed in the Strategic Plan), and that M&E remains a vital part of GEO.

The Chair thanked the M&E WG and invited Plenary to note the document, which contained considerations and lessons learned. He emphasised that this particular document was a rich source of inspiration and that it benefitted from great experience gained over the past decade.

- Implementation Boards Considerations

Max Craglia, European Union Joint Research Center, presented the document on behalf of the Implementation Boards, noting the evolution of GEO's governance structure from four standing Committees in 2005, to three Implementation Boards, and now to a single Programme Board called for in the new Strategic Plan. He noted the key challenges and lessons learned over GEO's first decade, including: a set of shared goals; the need for coordination across tasks; the need for measurable results; keeping people involved; extending the GEO community; the importance of making the GEOSS infrastructure more relevant; the need for more resources; better connections between GEO Principals and national scientists; and the inverse relation with the number of priority projects and delivering high profile results. Recommendations based on the first ten years that will contribute to GEO's future success include: a greater focus on cross-cutting activities; maintaining volunteer engagement and motivation, especially during the 2016 transition year; avoiding fragmented governance of the GEOSS Common Infrastructure (GCI);

sustaining the GCI as a public good; implementing the data sharing and data management principles; developing stronger national coordination of GEO; improving engagement and recognition of national and individual contributions to GEO; supporting the cross-cutting themes of climate and weather in the absence of specific SBAs; and ensuring the continuity of oversight and management between the current Boards and the new Programme Board.

The Chair expressed appreciation for the report and noted that the Programme Board will need to consider the conclusions presented in terms of ensuring coordination across GEO's activities.

- The Value of Open Data Sharing

Simon Hodson, CODATA, presented the document, which was prepared by CODATA, in cooperation with the GEO Secretariat. The report was designed to survey the current evidence on the value and benefits of open Earth observation data sharing, which are presented in five categories: Economic Benefits, Social Welfare Benefits, Research and Innovation Opportunities, Education and Governance. The documented benefits include: greater returns on public investment; meeting social expectations about the availability of public-funded data; utility in research and education, including, data mining, reproducibility, citizen science, downstream applications and commercial innovation; and better informed decision-making. The document provides a firm foundation for GEO's further advocacy for open data sharing, as called for in the Ministerial Declaration, but could benefit from additional examples, which should be forwarded to secretariat@geosec.org.

The Chair thanked the speaker for the presentation. China voiced its strong support for the white paper noting that more examples and the use of graphics, as well as more emphasis on value added by data providers, would make the document more impactful. The World Meteorological Organization (WMO) found the white paper very useful, noting the economic benefits of open data policies outweigh the costs of recovery. WMO would be very happy to continue working with the GEO Secretariat on this important issue.

Data Management Principles Implementation Guidelines

David Halpern, Committee on Space Research (COSPAR) and NASA Jet Propulsion Laboratory, presented the document, acknowledging the contributions of the DMP-TF Members and Partners, comprising 13 GEO Members and 13 GEO Participating Organizations. He provided a timeline of the development of the Principles and the work underway on the preliminary version of the Data Management Principles Implementation Guidelines. The Guidelines provide an explanation of each principle (Discoverability, Accessibility, Usability, Preservation and Curation) and examples of their implementation. The Guidelines are open for comment through 15 March 2016 at the following link http://www.earthobservations.org/survey_dmp_ig and, following revisions and further review, will be presented for adoption at the GEO-XIII Plenary in November 2016.

The Chair thanked the DMPTF for the highly informative report and congratulated the DMPTF for achieving so much in so little time.

World Data System/ICSU stated that the trustworthiness of data resources shared through GEO is important for decision-making and the Data Management Principles provide best practices to enhance the data life-cycle for GEO's Data Sharing Principles. He congratulated the DMP-TF for developing the guidelines and looked forward to refining the document, noting that the WDS foundational Certification framework is offered to GEOSS and its data providers as a universal standard for basic certification of trustworthy data repositories and data service organizations.

5 PRESENTATION BY THE IMPLEMENTATION PLAN WORKING GROUP (IPWG) OF THE GEO STRATEGIC PLAN 2016-2025: IMPLEMENTING GEOSS

Jörn Hoffmann, Germany, presented the document on behalf of the Implementation Plan Working Group (IPWG), thanked the IPWG and reviewed the development of the new Strategic Plan. He noted that the Plan was crafted with a focus on GEO's successes; its new and emerging activities; lessons learned; the strength of the GEO community, including its new Members and Participating Organizations; and the gaps that remain in Earth observation needs. The Plan is comprised of two parts – Strategy and Implementation – with an emphasis on maintaining GEO's voluntary and intergovernmental nature, open community, and GEOSS' and GEO's principles. The Strategic Plan provides a framework to achieve GEO's agenda that includes a new Work Programme, Strategic Objectives, Core Functions and detailed objectives and targets applied to GEO activities. He noted the new Societal Benefit Areas (SBAs): Biodiversity and Ecosystem Sustainability, Disaster Resilience, Energy and Mineral Resources Management, Food Security and Sustainable Agriculture, Infrastructure and Transportation Management, Public Health Surveillance, Sustainable Urban Development and Water Resources Management, and stressed that "climate" cuts across all of the SBAs. He highlighted improved effectiveness and efficiency through new implementation mechanisms (Foundational Tasks, Community Activities, Initiatives and Flagships), the Programme Board and Work Programme, noting that reports on activity progress will now be completed by the GEO Secretariat. Further, the new Plan provides for greater participation by Participating Organizations through the Programme Board. Issues that still require attention beyond adoption of the Strategic Plan include GEO's legal status, resourcing of GEO activities, the role of the private sector, and implementing the new structures and mechanisms.

The Chair thanked the IPWG, noting the significant investment of time and effort by each member over the past 18 months.

Plenary acknowledged the enormous effort invested by the IPWG and the very positive outcome embodied in the Strategic Plan. Members and Participating Organizations (POs) complimented various elements of the Plan, including: the alignment of the SBAs with the challenges facing the planet today and into the future; the focus on further development of GEOSS as a key global data source; the responsiveness of the IPWG process; recognition of the contributions of POs; emphasis on GEO's convening power to identify user needs and develop solutions to real world problems; continued attention to the Radio Frequency issue; and building stronger relationships with UN agencies.

Members and POs also pointed out various areas in need of vigilance and added attention, including: concern about the lack of specific SBAs for climate and/or weather (Croatia, European Commission, South Africa, Zimbabwe, COSPAR, ECMWF, and WMO); engaging developing nations (Sweden will assist) and the private sector; maintaining a focus on monitoring and evaluation; ensuring the sustainability of GEO and GEO activities; clarifying GEO's legal status (Switzerland will assist); more focus on engaging with users and policy makers; and GEO's ability to engage at higher political levels (e.g., the challenge of attracting Ministers to Summits).

Mr Hoffmann expressed appreciation at the overwhelming positive response by Plenary to the Strategic Plan. He noted that the decision to exclude a specific SBA for climate and weather was difficult, but the IPWG felt they were domains that transcended normal categorization and were, indeed, an element across all of GEO's activities. Regarding GEO's engagement at the highest political levels, the intention of the various Implementation Mechanisms is to create platforms to build that engagement at the national level, especially through Flagship activities.

The Chair noted that the Plenary, while clearly supporting the Strategic Plan, there were strong signals from several delegations to further emphasise the domain of climate change in the Strategic Plan. The Chair asked Plenary to agree to allow the IPWG Co-Chairs, and those having made interventions on this issue, to develop language regarding the climate and weather issue for presentation to Plenary before its conclusion.

Outcome: The document was approved, with the IPWG Co-Chairs delegated by Plenary to develop appropriate language regarding the role of climate and weather in GEO activities. This revised language was included in the version presented to the Ministerial Summit.

6 TRANSITION 2015 TO 2016 AND APPOINTMENT OF THE PROGRAMME BOARD

6.1 Transition Plan

Giovanni Rum, GEO Secretariat, presented the document, highlighting that it provides a comprehensive overview of the changes affecting GEO's structures, processes and activities in transitioning from the first to the second GEO decade and implementing the new *GEO Strategic Plan 2016-2025: Implementing GEOSS*. The document outlines the principles that will inform the transition, namely maintaining momentum, promoting seamlessness, and fostering continued engagement. In addition, while recognizing the two different, but integrated "dimensions" of this transition, the institutional and the individual ones, it largely focuses on the institutional dimension. He recalled that specific matters (such as Programme Board appointments and revision of the GEO Rules of Procedures) are addressed by dedicated points later in the Plenary agenda.

6.2 Appointment of the Programme Board

Douglas Cripe, GEO Secretariat, provided a status report on nominations to the Programme Board, indicating that, at present, there are 24 nominations (15 GEO Members and 9 POs). The Terms of Reference call for 16-32 members, with minimum representation of 40% for both Members and POs. He also presented a matrix representing the distribution of nominees by region and domain expertise, and indicated the regions and areas of expertise currently lacking representation. He stated that the Executive Committee recommends that Plenary approve the current slate of nominees and extend the nomination period (for new nominees and alternates) through 30 November 2015.

Discussion by Plenary focused on clarification of terms and the range of expertise needed, including management, not only scientific, expertise.

Outcome: Plenary accepted the current slate of nominations to the Programme Board. The deadline for additional nominations is extended to 30 November 2015.

7 REVISED CRITERIA FOR OBSERVERS, PARTICIPATING ORGANIZATIONS AND MORATORIUM

Barbara Ryan, Secretariat Director, presented the document, highlighting changes to the criteria for Observers and POs, and noted the inclusion of language in the revised Rules of Procedure encouraging active engagement by POs. The Executive Committee supports the revised criteria and, in light of these, recommends to Plenary that the moratorium on new POs be lifted.

The Chair indicated its intention to consider the various issues in sequence.

Outcome: The revised Criteria for Observers and POs were approved.

Outcome: The moratorium on new POs was lifted.

Outcome: Language to include "not-for-profit associations of commercial entities" in the Criteria for Observers and POs was approved.

8 REVIEW OF APPLICATIONS FOR OBSERVER STATUS

Outcome: The applications for Observer status were approved: the Inter-Islamic Network on Space Sciences and Technologies (ISNET), Organisation for Economic Co-operation and Development (OECD), and UN Initiative on Global Geospatial Information Management (UN-GGIM).

Canada requested clarification on GEO's policy regarding programs within organizations applying independently for Observer or PO status, noting that Future Earth (applying for PO status) is a program of the International Sciences Union (ICSU).

The Secretariat Director responded noting that several programs within organizations are currently GEO Participating Organizations (e.g., CODATA, GCOS, WDS and WCRP), based on what they individually contribute to GEO separate from their parent organization. In the case of Future Earth, several sub-programs were already POs – Diversitas, IGBP – and these programs have been replaced by Future Earth. Essentially, Future Earth's application for PO status is more of an administrative change, as the same people are involved only under a different banner.

Canada stated this is an element that should be reviewed by the Executive Committee as this practice needs clarification. In GEO's early years, there was a more relaxed set of rules, but as things have been going along, GEO should perhaps become more discriminating. In addition, several Members have requested that GEO and Future Earth should collaborate closely to ensure maximum synergies and avoid duplication of effort.

The Chair indicated that the Executive Committee will examine the issue.

Outcome: The applications for Participating Organization status were approved, the Commission on the Protection of the Black Sea Against Pollution (BSC), International Research Center on El Niño (CIIFEN), the European Severe Storms Laboratory (ESSL), Future Earth, Research Data Alliance (RDA) and The World Bank (IBRD/IDA).

Outcome: Plenary granted authority to the Executive Committee to consider and approve future applications for Observer and Participating Organization status, with Plenary annually welcoming the new participants.

The Chair welcomed the new Participating Organizations, noting that their contributions will help GEO to continue moving forward.

9 GEO ENGAGEMENT WITH STAKEHOLDERS

Co-Chair Kathryn Sullivan, United States, presented the document, noting that the elements of engagement with the private sector called for by the GEO-X Plenary and Geneva Ministerial Summit have been incorporated into the new Strategic Plan. She outlined the several "tiers" of potential engagement by the private sector, focusing on Tier Three, describing it as the most potentially valuable and complicated segment. This Tier is where the creativity, innovation, scale, and speed to market of the private sector in the applications domain is considerable and not something that GEO can easily replicate, but could be of great value in GEO's efforts to achieve its goals. GEO's goals and objectives could be achieved more quickly if the resources of the private sector were contributed to GEO in the proper way. A possible approach to engagement would be to create a category of "Corporate Partner", which is commonly used in non-profit institutions in the United States that wish to have the benefit of private sector expertise, equipment or funds, but without relinquishing control of their institutions or agendas. Membership would be a two-way negotiation. The value proposition to the company is that GEO is a consortium worth being a part of, there is value in being exposed to the agendas of other nations and that there is a reputational benefit to the company to serve a public purpose. Companies of different sizes could make different levels of contributions (cash to the GEO Trust Fund, hardware, training and capacity building, etc.). Each country would continue to make its own decisions on data by private companies. She stressed that the document is a draft concept paper that is open for comment and revision.

Discussion by Plenary focused on definitions of terminology, the context behind engaging with the private sector as proposed, how potential conflicts of interest would be addressed, where and how corporate contributions would be made to GEO activities. Plenary encouraged circulation of the document to solicit feedback from all regions and perspectives in GEO. This was embraced by Dr Sullivan who noted that proper definitions are essential, GEO needs to be alert to potential conflicts of

interest, and it needs to prevent monopolies from being created such that GEO becomes overly dependent on a single partner. She welcomed more case studies of examples with all other input.

Outcome: Secretariat will distribute the paper for comment so that the Executive Committee can deliberate the matter during 2016, and propose action for GEO-XIII.

Presentation by The World Bank

Ede Jorge Ijjasz-Vasquez, Senior Director, Social, Urban, Rural and Resilience Global Practice, addressed Plenary describing a number of global trends and their impact on the poor and in developing countries. He explained how the Bank uses geospatial information and the need for a paradigm shift in the types of data collected and information generated. He noted the Bank is engaged in multiple global and regional partnerships involving governments, bilateral and multilateral development agencies, civil society and the private sector. The Bank sees GEO as an important partner, especially in the areas of knowledge exchange, scaling up from pilot projects, technical advocacy and technical assistance.

The Chair expressed appreciation for the presentation and stated that GEO looks forward to future collaborations.

Plenary discussion focused on GEO's contributions to the SDG process with Australia, Japan, Mexico and CEOS stating the need for GEO to quickly bring together the national Earth observation and statistical communities in Member countries to begin a dialogue on the utility of EO in measuring, monitoring and achieving the SDGs. Existing and potential connections between GEO, the World Bank and the UN Global Geospatial Management Initiative (UN-GGIM) were also referenced.

5 PRESENTATION BY THE IMPLEMENTATION PLAN WORKING GROUP (IPWG) OF THE GEO STRATEGIC PLAN 2016-2025: IMPLEMENTING GEOSS - CONTINUED

Jörn Hoffmann, IPWG, presented draft language regarding the role of climate in GEO activities for insertion in the GEO Strategic Plan 2016-2015 (Document MS4). This was accepted by Plenary and the Ministerial Document was amended.

10 TRANSITIONAL WORK PROGRAMME 2016

Giovanni Rum, GEO Secretariat, presented the document, noting that the 2016 Work Programme was developed based on extensive consultation with the GEO community. He indicated that its structure addresses the Core Functions and incorporates the modifications in the GEO organizational structure defined in the Strategic Plan. Key elements of the Work Programme include: i) the activation of new activities directly derived from the GEO Core Functions, such as the SBA process on User Needs and the development of the Knowledge Base; ii) dedicated and better focused activities in areas not addressed to full satisfaction in GEO's first decade, such as communications and engagement, *in situ* observations and the operation of the GCI; and iii) the introduction of the new Implementation Mechanisms (Foundational Tasks, Community Activities, Initiatives and Flagships). The proposed Programme includes a total of 71 activities, addressing all new Societal Benefit Areas (except Infrastructure and Transportation). These activities, according to the provisions of the Strategic Plan and following guidance from the Executive Committee, are classified as Community Activities, Candidate Initiatives or Foundational Tasks. A coordinated set of Foundational Tasks provides GEO with a common "platform" by ensuring the orderly functioning of GEO, maintaining and broadening the GEO Community and developing key GEO elements, such as GEOSS and GCI, User Needs, Knowledge Base, Capacity Building Coordination, Communication and Outreach. Candidate Initiatives will be assessed by the Programme Board in 2016 to confirm their inclusion in future Work Programmes as GEO Initiatives or GEO Flagships. Mr Rum made it clear that these new arrangements imply an increased role for the Secretariat, which, as articulated in the Strategic Plan, is twofold: to ensure coordination among the different teams in charge of the Foundational Tasks; and to provide a clear point of reference for the other GEO activities (Flagships, Initiatives, and Community

Activities). This new role and responsibilities have a direct impact on resources needed and a corresponding increase of funding for the Trust Fund is requested for the 2016 Budget.

Plenary discussion generally supported the plan, while noting the importance of GEO engaging at the regional level in addition to the national level. China indicated it will be making specific proposals for regional GEO activities. Canada noted its support of a number of ocean activities, MBON, and components of Blue Planet, and cited the need to closely integrate with other non-ocean entities, collaborations it will work to foster.

UNEP noted the clear guidance in the SDG Outcome Document which referenced the role of Earth observation (EO) and geospatial information that provide an unprecedented opportunity for GEO to meet the needs of the SDG process. The Programme Board should attempt to chart how Paragraph 76 of the Outcome Document can be addressed through the Work Programme, suggesting the need for a communication brochure articulating the contribution of EO to monitoring, as well as engaging with key UN agencies to assess user needs. UNEP referenced a UNOSAT meeting coming up in May 2016 as an opportunity to present how GEO can support SDG monitoring.

The Committee on Earth Observation Satellites (CEOS) stated it plans to continue as the space coordination arm of GEO, highlighting greenhouse gas, GFOI, GEOGLAM and the carbon strategy, and will extend its contributions to the GEO-DARMA initiative being developed in response to the Sendai Framework on Disaster Risk Reduction. CEOS also will be implementing a strategic response to the GEO water strategy.

Switzerland thanked the GEO Secretariat for useful information on how things are going to happen, or at least what is in the flight plan, noting the various practical steps that have to be considered to organize that which has been agreed. The Work Programme Symposium could be a means to demonstrate to Member governments that the transition is efficiently organized, noting a very management-oriented process is needed, perhaps including a managerial meeting to organize the next steps. New structures involves many changes, and Switzerland requested the GEO Secretariat to elaborate how all this is going to happen.

Mr Rum responded by stating that the thrust of the Work Programme is both bottom-up and top-down. All proposed changes to the Work Programme will be incorporated in the next draft, to be released before the end of 2015. He expressed appreciation for the commitments made by Members and POs, and, regarding the SDGs, noted that there is an SDG activity in the Work Programme and that a highly successful SDG Side Event was held earlier in the week which will provide the foundation for an activity team to move forward. Regarding the management issues raised, he stated that three concurrent activities will emerge: ensuring the transfer of functions as smoothly and as quickly as possible; ensuring the Work Programme gets underway; and exploring revisions to the objective and format of the Work Programme Symposium.

Outcome: The document was approved.

Meeting adjourned at 5:30 pm.

Thursday, 12 November 2015

Meeting convened at 9:00 at Ministry of Foreign Affairs, Sala Jose Morelos

11 GEO FEATURED INITIATIVES

Chair: Rudolf Strohmeier, Deputy Director-General, Directorate General for Research and Innovation, European Commission

11.1 AmeriGEOSS

Diana Quimbay (Colombia), Jose Eduardo De La Torre Barcena (Mexico), and Nancy Searby (United States) presented an update on the emerging AmeriGEOSS initiative, which is comprised of the 15 Members of the Americas Caucus and is designed to increase institutional and personal capacity and engage experts, stakeholders and policy makers in the process of decision-making. Priority areas for the initiative include, agriculture, disaster risk reduction, water, and biodiversity and ecosystem monitoring. They provided a description of the structure of the initiative and outlined the areas of focus of the various working groups, including supporting regional efforts to achieve several of the SDGs, supporting various national and global mandates, and supporting the development of Marine Bon (mBON). AmeriGEOSS will also coordinate and leverage existing and planned national, regional, and international activities to address data access and sharing, interoperability, infrastructure and capacity building needs in the Americas.

11.2 GMOS

Nicola Pirrone, Italy, presented an update on the Global Mercury Observations System (GMOS), outlining the several scientific and policy questions that guide the initiative's agenda. GMOS has three primary components, a worldwide observation system, modelling and an interoperable system for sharing information. He noted that GMOS is engaged with a range of global organizations and programs including UNEP, UNECE, the Global Environmental Fund (GEF) and regional programs in Europe, North America and Asia. GMOS is an integral component of the monitoring process for the Minamata Convention on Mercury, and will be part of the proposed GEO Flagship on Persistent Chemical Pollutants, which will also address the needs of the Stockholm Convention.

11.3 GEOGLAM

Alyssa Whitcraft, GEOGLAM, presented an update on the GEO Global Agricultural Monitoring (GEOGLAM) Initiative, noting its 2011 policy mandate from the G20 Ministers of Agriculture. GEOGLAM is being implemented through six components – three core and three cross-cutting. The GEOGLAM Crop Monitor (CM) for AMIS is the quintessential example of what GEOGLAM is poised to do: convert EO data into policy relevant information. The 35 Crop Monitor partners provide transparent and timely crop condition assessments for corn, rice, soy and wheat with the end goal of reducing market volatility. An additional, significant outcome of the Crop Monitor has been the production of new, EO-derived crop type maps that have not previously existed at the global scale and resolution, which provide critical inputs to agricultural monitoring. CEOS is an integral partner in the initiative. An emerging GEOGLAM activity is to develop tools to identify “countries at risk”. The GEOGLAM Advisory Committee, comprised of senior, national agriculture policy makers, held its first meeting earlier in the week in Mexico City.

11.4 GFOI

Douglas Muchoney, United States, presented an update on the Global forest Observations Initiative (GFOI), noting leadership from Australia, Norway, the USA, the Food and Agriculture Organization of the United Nations (FAO), and CEOS. An Advisory Committee includes representatives of several major global frameworks and organizations. GFOI's principal mission is to foster the sustained availability and use of satellite data for forest monitoring to better manage forest resources. The

primary GFOI components are Space Data, Capacity Building, Methods and Guidance, Research and Development, and the GFOI Office. Accomplishments to date include, sustained progress toward global coverage by 2016, development of the Methods and Guidance Document, and numerous capacity building workshops in target countries in South America, Southeast Asia and Central Africa in collaboration with SilvaCarbon. The 2016 agenda includes a GFOI Plenary and Open Forum in February, establishment of the GFOI Office at FAO, and further development of Methods and Guidance resources.

The Chair thanked all of the presenters and invited Plenary to encourage the full GEO community to support the initiatives and advertise their successes. He noted for example, the GEOGLAM crop forecasting initiative for Tanzania, which is not yet a GEO member, can demonstrate GEO's added value as a means of encouraging countries to join GEO.

12 PROPOSED 2016 BUDGET AND FINANCIAL DOCUMENTS

(Proposed 2016 Budget, 2014 Financial Statements and Report of the External Auditor, Interim Report on Income and Expenditure)

John Matuszak, United States, representing the Budget Working Group (BWG), presented the proposed 2016 Budget and related Financial Statements. He noted that GEO Trust Fund currently has 2.4M CHF in reserves, is in sound financial condition, and received a clean audit report for 2014. He indicated the auditors suggested GEO consider raising its reserve to the equivalent of one year's salary expenditures, and expressed appreciation to the WMO and Swiss (external) auditors. He informed Plenary that the 2015 projected budget would most likely run in surplus, due to the responsible management exercised by the GEO Secretariat. The anticipated cash contributions for 2016 are significantly higher than in the past due to the need for GEO to meet the requirements – in particular, the Foundational Tasks - specified in the Strategic Plan. He stated that the BWG recommends that Plenary approve the 2016 Budget, but that further revisions to the budget may occur as a result of the actual availability of the resources identified, and the effects of implementing the BWG recommendations identified in the document.

The Chair noted that the presentation effectively covered Documents 19 and 20, and that discussion should also include Agenda Item 14. The United States expressed appreciation for the work of the BWG, noting it provides added confidence that the Secretariat is operating within safe financial parameters. The Secretariat Director noted that since the publication of the Interim Statement of Income and Expenditure at 30 September, the contribution from Switzerland had been received.

Outcome: The documents were approved.

13 UPDATES TO RULES OF PROCEDURE

The Chair introduced the document by stating that the 35th Session of the Executive Committee, held on 10 November, had reviewed and approved modifications to the Rules of Procedure jointly proposed by the European Commission, Germany and Italy.

Barbara Ryan provided a brief overview of the document, noting that many revisions to the Rules of Procedure were based on the new Strategic Plan and discussions within the Executive Committee. She indicated that the Terms of Reference for the Budget Working Group are proposed to be reinstated by recommendation of the Executive Committee. The revised criteria for Observers and POs had accepted by Plenary the previous day, as was the delegation of authority for the Executive Committee to decide on future Observer and PO applications.

Discussion by Plenary focused on: whether nominations for the Programme Board are still being accepted; whether the Rules of Procedure should include ethical guidelines; and clarify whether Observers can intervene and make Statements during Plenary.

China expressed concern that Section 4.5 indicates that the Executive Committee Co-Chairs should be comprised of at least one from a developing country and one from a developed country (“1+1”), which is a change from the current rules that state there are two Co-chairs each from developing and developed countries (“2+2”). The change to 1+1 had been recommended by the IPWG, but not accepted by the 34th Session of the Executive Committee, and the Rules of Procedure should reflect the Executive Committee’s decision. China proposed to maintain the current formula of 2+2. No delegation objected to this proposal.

The Secretariat Director responded to Plenary, indicating that nominations to the Programme Board will be accepted through 30 November and that the Programme Board will decide on its representatives to the Executive Committee, based on documented contributions to GEO in the past, and intended contributions in the future. Regarding the 1+1 issue, she stated that, in the interest of encouraging Co-Chair rotation, the IPWG did not accept the Executive Committee’s recommendation that the 2+2 rule remain in effect, and it is ultimately the decision of Plenary to decide which formula to retain. On the issue of Observers having the right to intervene and make Statements during Plenary, she noted that Observers have always had the right to speak, but simply not participate in Working Groups or other governance structures.

The Chair indicated that the 1+1 formula may require additional discussion in 2016, in light of China’s proposal to maintain the current 2+2 formula. . He proposed adopting the document with provisos to bring the question back to the Executive Committee to re-evaluate the suggestion raised by IPWG in 2016. The United States reinforced Norway’s request that proposed ethical guidelines also be brought forward for consideration at the next Plenary.

Outcome: The revised Rules of Procedure were adopted.

14 FORMAL STATEMENTS BY MEMBERS AND PARTICIPATING ORGANIZATIONS

Members and Participating Organizations provided Statements describing their contributions and commitments to GEO. Australia announced a 75,000 AUD contribution to the GEO Trust Fund. Chile announced it will bring a new GEONETCast station on line. Germany will continue its support of the GEO BON Office. The Netherlands announced its government has adopted an open data policy. ECMWF informed Plenary that TIGGE has been extended for an additional four years. EUMETSAT announced that the GEONETCast partnership (China, Europe, United States) has been renewed for another ten years. ICIMOD announced the formation of a Himalayan GEO.

Statements are available at: <http://www.earthobservations.org/geo12.php?smid=1900>

15 2015 REPORT OF THE EXECUTIVE COMMITTEE

Co-Chair Phil Mjwara, South Africa, presented the Report, noting the issues considered by the Executive Committee in 2015 included providing guidance to the IPWG in the development of the Strategic Plan; monitoring and contributing to the GEOSS Evaluation process; development of the GEO Engagement Strategy, including rules of engagement for the commercial sector; evaluating the moratorium on POs, revising the criteria for selecting and evaluating PO participation and contributions to GEO; oversight of the transition of GFOI from GEO to FAO; evaluation of the 2016 Transitional Work Programme overall transition from GEO’s first decade to its second; and oversight of the operations of the GEO Secretariat.

Outcome: The report was adopted.

16 PRESENTATION OF NOMINEES FOR THE EXECUTIVE COMMITTEE

Outcome: The slate of nominees for the Executive Committee was adopted.

The 2016 Executive Committee will include the following members:

- Africa: South Africa (Co-Chair), Egypt, Senegal;
- Americas: USA (Co-Chair), Colombia, Mexico;
- Asia-Oceania: China (Co-Chair), Australia, Japan, Republic of Korea;
- Commonwealth of Independent States (CIS): Armenia, Russian Federation; and
- Europe: European Commission (Co-Chair), Finland, France, Germany.

17 GEO-XIII ANNOUNCEMENT

The Russian Federation announced its offer to host the GEO-XIII Plenary in St. Petersburg from 9-10 November 2016.

18 ANY OTHER BUSINESS

Germany requested that future Plenary sessions focus more on programmatic discussions and that written reports on those topics be provided in advance of the meeting.

The United States reiterated its request for written comments on the “Corporate Partner” commercial sector paper.

Geospatial Media expressed its appreciation to the GEO Community for the opportunity to co-locate LAGF with the GEO-XII Plenary and looked forward to continued close collaboration with GEO in the future.

Closing Remarks

Mexico thanked all parties for their hard work and fruitful deliberations, expressed its pleasure at hosting the GEO-XII Plenary, and wished the Russian Federation the best in hosting the GEO-XIII Plenary.

The Secretariat Director thanked the Executive Committee, Co-Chairs and participants for a remarkable week, especially the numerous Side Events organized by Members and POs which clearly demonstrate the convening power of GEO.

The China Co-Chair stated that the Plenary was a complete success, and welcomed the new Members and POs. He noted that GEO now has in place a new Strategic Plan, eight new SBAs and clear goals for GEO’s next decade. He emphasized that now is the time for GEO to play an expanded role in the development and application of Earth observation technologies, establish regional GEOs and support sustainable development. He concluded by thanking the Mexican host, the Secretariat, under Director Ryan’s leadership, for its hard work in preparing for Plenary, and all participants for their contributions.

The South Africa Co-Chair expressed sincere thanks to the GEO community and applauded the transparent process of the IPWG. He noted that the success of the Strategic Plan is due to the contributions of the GEO community to the IPWG process. He specifically thanked the Co-Chairs of IPWG for their patience, generosity and their time, especially in light of some of the more animated discussions that occurred during the process. He noted Jörn Hoffmann (Germany) and Danielle Lacasse (Canada) and the other Co-Chairs as instrumental in guiding the process. He also thanked the members of the community who have contributed in other ways over the years, particularly through the Task Forces, Implementation Boards and Working Groups. He expressed appreciation to the GEO Secretariat, under Director Ryan’s leadership, for its dedicated work in preparing the Executive Committee meetings, Plenary and Ministerial Summit. He concluded by thanking Mexico as host, and the Co-Chairs for their continued guidance and efficient chairing of the Executive Committee.

The United States Co-Chair wanted to echo the words of her fellow Co-Chairs. This has been an excellent Plenary which is a testament to this community and the contributions of time and talent that allowed us to come into this meeting with a strong foundation for planning the next decade. She thanked the IPWG Co-Chairs, commenting on the excellent job the IPWG did of reflecting on the

lessons of GEO's first decade and translating those into a strong Strategic Plan. GEO has built a solid foundation of tools and services, but its strength also comes from the people involved, not just the document. GEO has great challenges ahead, but has built a community that can tackle them. She thanked the GEO Secretariat, noting the level of effort, time and care, invested over months in advance, to make sure an event like this goes smoothly. She expressed "muchas gracias" to Rolando Ocampo, Eduardo de la Torre and the INEGI team, and wished the Russian Federation well in preparing for the next Plenary.

The European Commission Co-Chair thanked his fellow Co-Chairs for the collegiality, underlined that he supported their comments. He thanked the Mexican hosts for their hospitality and INEGI for their excellent organization; Mr Strohmeier expressed particular appreciation to the IPWG, co-chairs, Toshio Koike (Japan), Islam Abou El-Magd (Egypt), Danielle Lacasse (Canada), and Jörn Hoffmann (Germany). He expressed his thanks to the GEO Secretariat Director and staff for their hard work over the past year. He paid tribute to the GEO community for their input into the Strategic Plan, and thanked Mexico for its hospitality. As Plenary Chair, Mr Strohmeier thanked all participants for the excellent spirit and positive contributions that had inspired us and helped to enhance discussions. He felt sure that GEO could go forward with confidence in the decade ahead.

Meeting adjourned at 5:00 pm.

19 REVIEW OF SESSION OUTCOMES

Draft Agenda

Group on Earth Observations

Twelfth Plenary Session – GEO-XII

Mexico City, Mexico 11-12 November 2015

Chair: European Commission

Wednesday, 11 November 2015

1 Opening Sessions

1.1 Welcome from the GEO Principal of Mexico

Opening Remarks

- Rudolf Strohmeier, Deputy Director-General, Directorate General for Research and Innovation, European Commission (Chair of the Session);
- Jianlin Cao, Vice-Minister of Science and Technology of the People's Republic of China;
- Philemon Mjwara, Director-General, Department of Science and Technology, Republic of South Africa;
- Kathryn Sullivan, Administrator and Under Secretary of Commerce for Oceans and Atmosphere, Department of Commerce, United States of America;
- Barbara Ryan, Director, GEO Secretariat.

1.2 Administrative Announcements

1.3 Adoption of the Draft Agenda (Plenary Document 1) *(for decision)*

Adopted; agenda point 1.5 moved to after 7

1.4 Recognition and Statements from New Members (Plenary Document 2) *(for information)*

1.5 Review of Applications for Observer Status (Plenary Document 3) *(for decision)*

Approved (subsequent to adoption of revised criteria, agenda point 7, Document 14)

1.6 Approval of the Draft GEO-XI Report (Plenary Document 4) *(for decision)*

Approved

2 Mexico City Draft Declaration (Ministerial Document 3) *(for discussion)*

Declaration approved, with modification proposed by Mexico

3 Mexico City Ministerial Summit Overview

3.1 Mexico City Ministerial Summit Programme (Ministerial Document 1) *(for discussion)*

Approved

3.2 Mexico City Ministerial Summit Draft Agenda (Ministerial Document 2) *(for discussion)*

Approved

4 GEOSS Implementation 2005-2015

4.1 Summary Assessment of Progress – Targets and Tasks (Plenary Document 5) *(for information)*

- Part I Target Assessment: Final Assessment of Progress against the GEOSS 2015 Strategic Targets
- Part II Task Assessment: GEO 2012-2015 Work Plan Implementation Report

4.2 Report of the Sixth and Summative Evaluation of GEOSS Implementation (Plenary Document 6) *(for information)*

4.3 Lessons Learned from GEO's First Decade:

- Monitoring and Evaluation (Plenary Document 7) *(for information)*
- Implementation Boards Considerations (Plenary Document 8) *(for information)*

Additional background documents for information only:

- The Value of Open Data Sharing (Plenary Document 9) *(for information)*
- Data Management Principles Implementation Guidelines (Plenary Document 10) *(for information)*

5 Presentation by the Implementation Plan Working Group (IPWG) of the GEO Strategic Plan 2016-2025: Implementing GEOSS (Ministerial Document 4) *(for decision)* and Reference Document (Plenary Document 11) *(for decision)*

Strategic Plan approved, with modifications from IPWG co-chairs;

Strategic Plan Reference Document approved;

Work of IPWG noted and appreciated.

6 Transition 2015 to 2016 and Appointment of the Programme Board

6.1 Transition Plan (Plenary Document 12) *(for information)*

6.2 Appointment of the Programme Board (Plenary Document 13) *(for decision)*.

Approved; nomination deadline extended until 30 November 2015

7 Revised Criteria for Observers, Participating Organizations and Moratorium (Plenary Document 14) *(for decision)*

Revised criteria approved and moratorium lifted

8 GEO Engagement with Stakeholders (Presentation)

Thursday, 12 November 2015

9 GEO Featured initiatives

9.1 AmeriGEOSS (Presentation)

9.2 GMOS (Presentation)

9.3 GEOGLAM (Presentation)

9.4 GFOI (Presentation)

10 Transitional Work Programme 2016

10.1 2016 Work Programme (Plenary Document 15) *(for decision)*

Approved

10.2 Proposed 2016 Budget (Plenary Document 16) *(for decision)*

Approved; work of BWG noted and appreciated

11 Updates to Rules of Procedure (Plenary Document 17) *(for decision)*

Approved, with provisos:

- *maintain the current GEO co-chair formula as 2+2 (developed and developing country representation);*
- *discuss the proposal of IPWG to change the co-chair formula in the Executive Committee meeting in 2016;*
- *GEO-XIII will consider the inclusion of Ethical Guidelines.*

12 Formal Statements by Members and Participating Organizations

Statements maximum duration of 2 minutes

13 2015 Report of the Executive Committee (Plenary Document 18) *(for decision)*

Approved

14 Financial Reports

14.1 2014 Financial Statements and Report of the External Auditor (Plenary Document 19) *(for decision)*

Approved

14.2 Interim Report on Income and Expenditure (Plenary Document 20) *(for information)*

15 Presentation of Nominees for the Executive Committee

Slate Approved

16 GEO-XIII Announcement

9-10 November 2016, Saint Petersburg, Russian Federation

17 Any Other Business

18 Review of Session Outcomes

Draft List of Participants
GEO-XII
11-12 November 2015
Mexico City, Mexico

MEMBERS

Armenia

Harutyunyan Samvel
Saghatelyan Armen
Asmaryan Shushanik

Australia

Minchin Stuart
Mcdonald Elizabeth
Dekker Arnold
Held Alex
Steven Andy

Belgium

Rottiers Pieter

Brazil

Barbosa Tatiana

Canada

Grimes David
Lacasse Danielle
Ammouri Rima
Bourassa Marie-Josée
Dechka Jeff
Gill Mike
Jarvis Ian
Mcdougall Tony
Mills Laura
Ott Michael
Vézina Alain

Chile

Parodi Luciano
Bianchi Juan Luis
Cabezas Ricardo
Guzmán Álvaro
Monett H. Alvaro
Suarez Rodrigo

China

Cao Jianlin
Liao Xiaohan
Bai Yuqi
Chen Jun
Chen Zhongxin
Cheng Laiyi
Feng Guojian
Gan Fuping
Gong Peng
Gu Xingfa
He Changchui
Hu Xin
Lan Yue
Li Qi
Liu Chuang
Liu Runxia
Liu Shunxi
Luo Zhiguang
Pan Mali
Qin Qiming

China continued

Shan Weidong
Shi Jiancheng
Sun Liping
Sun Wei
Tang Yan
Wang Qiao
Wang Zhigang
Wu Bingfang
Wu Chunhui
Xie Chunlei
Xu Wei
Yan Dongmei
Yu Qing
Yu Yanhua
Yue Huanyin
Zhang Xingying
Zhao Datong
Zhong Xing
Zhou Xiang

Colombia

Quimbay Diana
Castillo Liliana
Londoño Maria
Quiroga Ricardo

Costa Rica

Fallas Juan Carlos

Croatia

Cacic Ivan

Czech Republic

Klanova Jana
Hulek Richard

Denmark

Thyrring Marianne

Ecuador

Arizaga Leonardo
Martínez Mónica
Diaz Paola
Granja Danilo

Estonia

Kutser Tiit
Talkop Reet

European Commission

Strohmeier Rudolf
Ollier Gilles
Abad Leire
Arslan Ali Nadir
Belward Alan
Berger Michael
Boissonnade Annabel
Bossu Rémy
Castrillo Miguel
Chabbi Abad
Craglia Massimo
Decola Phil
Del Brenna Guilía
Filipov Lubomir
Galvez Carlos
Häuser Christoph
Higgins Chris
Holmes Gary
Kyba Christopher
Lampitt Richard
Leo Olivier
López Saldaña Gerardo
Marconcini Mattia
Masó-Pau Joan
Mitu Nicolae
Morel Guillaume
Pearlman Jay
Pesaresi Martino

European Commission continued

Rubio Iglesias Jose
Russo Maria Cristina
Santoro Mattia
Sawyer Geoff
Schouppe Michel
Shiel Jane
Williams Jamie
Zaffagnini Fabio

Finland

Strahlendorff Mikko
Arslan Ali Nadir
Juurola Eija
Kutsch Werner
Saarenmaa Hannu

France

Marbouty Dominique
Pircher Vincent
Chevrel Stéphane
Hosford Steven
Menard Lionel

Georgia

Bagratia Tamar

Germany

Becker Paul
Dettmann Carsten
Büßelberg Thorsten
Eberle Jonas
Fernandez Miguel
Freyhof Joerg
Hoffmann Jörn
Hüttich Christian
Pereira Henrique
Richter Bernd
Schmullius Christiane
Staudenrausch Helmut
Strauch Adrian

Guinea

Bah Mamadou

India

Murthy Krishna
Agrawal Ashutosh
Sannala Mangesh

Israel

Ben Dor Eyal

Italy

Bussoletti Ezio
Bombelli Antonio
Giorgetti Emilia
Mazzetti Paolo
Monti-Guarnieri Andrea
Nativi Stefano
Pirrone Nicola
Santoro Mattia

Japan

Mori Akinori
Higuchi Shinichi
Fukasawa Masao
Goda Akiko
Harada Mariko
Iwamoto Hiroyuki
Koike Toshio
Lawford Richard
Matsunaga Tsuneo
Matsuo Naoko
Muraoka Hiroyuki
Noda Hibiki
Pang Shijuan
Saisho Daisuke
Sobue Shinichi
Sueyoshi Tetsuo
Watanabe Chu-Ishida
Yamada Akiko

Korea, Republic of

Hong Seungho
Jeong So Yun
Kim Hak-Jae
Kim Hyun-Ok
Lee Byong-Lyol
Lee Donghan
Park Hoon

Madagascar

Ramarolahivonjitiana Frédéric
Noasilalaonomenjanahary
Ambinintsoa

Mexico

Ocampo Rolando
Borja Arturo
Caballero Gonzalez Juan Manuel
Castillo Olascoaga Teresa
De La Torre Barcena Jose Eduardo
De Lara Cardona Ana
Esparza Rios Luis Gerardo
Figueroa Fischer Bruno
Guerrero Elemen Carlos
Jimenez Nava Francisco
Lacy Tamayo Rodolfo
Lendo Fuentes Enrique
Mendieta Jiménez Francisco Javier
Obregon Andria Adriana
Ornelas Jose Luis
Orozco Serna Benito
Ortiz Ortiz Luz Maria
Riojas Martinez Rodrigo
Romero Ruiz Jesus
Urueta Jessica
Vargas Raul

Netherlands

Nieuwpoort Ger
Grim Ruud
Lantsheer Frank
Noort Mark

Nigeria

Halilu Ahmad

Norway

Nesje Øystein
Andersen Bo
Bye Bente

Romania

Nedelcu Ion
Badea Alexandru
Popescu Antoaneta
Vulturescu Viorel

Russian Federation

Asmus Vasily
Andreeva Zoya
Donchenko Sergey
Ermolenko Aleksey
Ganina Tamara
Kaverin Anton
Konyakhin Aleksander
Kosolapova Daria

Senegal

Dieye Amadou

Slovenia

Žlebir Silvo

South Africa

Mjwara Philemon
Chirima George
Jiphethu Mzwandile
Malan Martin
Malinga Sandile
Mangara Paidamwoyo
Moloele Letsholo

South Africa continued

Mudau Humbulani
Nogxina Sandile
Sebitloane Tumisang
Semoli Bulelwa
Senoko Lerato
Tyesi Mbongeni

Spain

Marcos Espinosa José María
Masó-Pau Joan
Serral Montoro Ivette

Sweden

Brennerfelt Rolf
Nilsson Stefan
Boberg Göran
Olovsson Stigbjörn

Switzerland

Romero José
Hüsler Fabia

United Kingdom

Boyd Ian
Amin Farhana
Marsh Stuart

United States

Sullivan Kathryn
Kimball Suzette
Adamec John
Bartuska Ann
Burkett Virginia
Canonico Gabrielle
Deloatch Ivan
Doorn Brad
Duffy Emmett
Eisenstadt Anita
Faeth Lori
Flores Africa
Foley Gary

Friedl Lawrence
Frye Stuart
Gevorgyan Yana
Gilbert Kelley
Gutierrez-Magness Angelica
Hermreck David
Irwin Daniel
Kershaw Jessica
Matias Raul
Matuszak John
McIntee Will
Mcnellis Kerry
Muchoney Douglas
Peters Debra
Price Wade
Putnam Heather
Quintero Russell
Rocha Daniel
Sayre Roger
Searby Nancy
Stokes Carrie
Stryker Timothy
Sullivan Don
Taylor Ethan
Valdez Pablo
Wagner Dash
Weaver Jean
Willis Zdenka
Wong Ari
Jewell Sally

Zimbabwe

Muzite Susan
Tagwireyi Paradzayi

PARTICIPATING ORGANIZATIONS

Belmont Forum

Key Erica

Bioversity International

Bellon Mauricio

CEOS

Held Alex

Ishida Chu

Bourassa Marie-Josée

Dekker Arnold

Killough Brian

Ross Jonathon

Smith Brent

Wood Eric

CODATA

Hodson Simon

Chen Robert

De Sherbinin Alex

Liu Chuang

Uhlir Paul

Zhou Xiang

COSPAR

Halpern David

ECMWF

Thorpe Alan

Thepaut Jean-Noël

EEA

Haigh Tim

ESA

Briggs Stephen

Petiteville Ivan

Stevens Claudia

ESIP

Fox Peter

Robinson Erin

Fowler Rebecca

EUMETSAT

Gabaglio Vincent

EuroGeoSurveys

Demicheli Luca

Herrera Gerardo

Delfini Claudia

Pino De Juana Isabel

Wall Patrick

Future Earth

Hernandez Mario

Ojima Dennis

GBIF

Costello Mark

GCOS

Briggs Stephen

Eggleston Simon

GRSS

Milne Anthony

GSDI

Remetey-Fulopp Gabor

Kopp Steve

i-BEC

Zalidis George

IAF

Smith Brent

ICIMOD

Molden David

ICSU

Mokrane Mustapha

IEEE

Garello Rene

Plag Hans-Peter

Davidson Osha

De Marca Roberto

Khalsa Siri Jodha

IEEE continued

Mulder Elise
Pearlman Françoise
Pearlman Jay
Zaslavsky Ilya

IHO

López-Cruz Manuel Ricardo

IIASA

Fritz Steffen

IISD

Lawford Richard

INCOSE

Crowder Kenneth

IOC

Fischer Albert

ISDE

Hernandez Mario

ISPRS

Chen Jun
Tong Xiaohua

ITC

Veldkamp Tom
Van Der Meer Freek

OGC

Reichardt Mark
Arctur David
Chou Tien-Yin
Foust Jeanne
Lovison-Golob Lucia
Taylor Trevor

POGO

Seeyave Sophie
Cerdeira Sergio
Chavez Francisco
Goldstein Philip
Hepner Megan
Reynolds C. J.

Santamaria Del Angel Eduardo

RCMRD

Okubasu Anangwe Byron

SWF

Simpson Michael
Delgado López Laura

UNEP

Gaetani Francesco

UNOOSA

St-Pierre Luc

WDS

Mokrane Mustapha

WMO

Blondin Christian
Zhang Wenjian
Garza Alfredo
Riishojgaard Lars-Peter

APSCO

Aorpimai Manop
Huang Hailing

PAIGH

Barriga Vargas Rodrigo

GUESTS

AZGS

Allison Lee

EAD

Pearson Simon
Gliddon Derek

Eawag

Podgorski Joel

ICRSE

Hutchinson Charles

RDA/US RPI

Fontaine Kathleen

Skoll Global Threats Fund

Lee Sylvia

UNSD

Scott Greg

Blake Cecille

GEO Secretariat

Ryan Barbara

Anderson Katherine

Baeyens Hendrik

Bérod Dominique

Chu Wenbo

Cripe Douglas

De Salvo Paola

Deshayes Michel

Geddes Patricia

Geller Gary

Loyola Claudia

Mlisa Andiswa

Obregon Andre

Ochiai Osamu

Rodriguez Sofia

Rum Giovanni

Samors Robert

Tiberghien Chloé

Xing Chao

GEOGLAM

Becker-Reshef Inbal

Whitcraft Alyssa

