CEOS Recommendations to the
GEO Post-2015 Working Group
30 May 2012

Earth observations continue to play an increasingly important role in helping societies address challenges to food, water, and energy security, and in making societies more resilient to natural hazards and more adaptive to climate change. There are substantial gaps in ongoing national, regional, and global efforts to address these challenges. GEO can and should play a key role in addressing these gaps in an effective and long-term manner through coordination and networking among its major stakeholders and by working together with other key international environmental mechanisms.

CEOS and its constituent space agencies have made significant progress in the provision, validation and coordination of space-based Earth observations and in assuring their accessibility to users. Fully conscious of the need to provide a full range of measurements of the Earth system in order to meet GEO's long-term objectives, CEOS is prepared to coordinate with *in situ* networks within the GEO community in working together to play a vital role as the observation arm of GEO.

With these circumstances in mind, CEOS offers the following recommendations for the future of GEO/GEOSS in connection with the GEO Post-2015 Working Group:

- GEO's original objectives do not need substantial changes, but in planning for a post-2015 future, GEO should conduct a critical review of its initial implementation effort. The results of such a review would be very important to assess the adequacy of GEO structures in relation to GEO objectives and the execution of GEO Tasks. The review should be carefully structured and led by experts who share a "corporate" GEO mindset, rather than a purely "national return," or lowest common denominator approach. It should aim to ensure an effective management and implementation structure.

- GEO should focus on developing and demonstrating uniquely important, value-added initiatives that involve sustainable, continuing collaboration among a wide range of countries, international organizations, and NGOs. These initiatives will demonstrate the added value of GEO if they can attain an operational, sustainable status. FCT and GFOI are early examples of this approach, with other initiatives addressing agriculture (JECAM and GEOGLAM), disasters (Geohazard Supersites), and biodiversity (GEOBON) at varying levels of maturity.

- While GEO can and should serve as a clearinghouse for ideas, it should not be oriented toward a diffuse range of small projects with limited personnel or financial support from their sponsoring organizations. Consistent with identified needs as well as charges from G-8/G-20/International Conventions, GEO should instead focus on coordination of a smaller number of highly visible, major projects with global impact and involvement (personnel and financial) from major stakeholders and partners, that can continue on an operational, sustainable basis. In line with this recommendation, GEO should have a more focused and simplified GEO Work Plan and Work Plan management structure.

- In setting its objectives and defining its scope of activity, GEO should be clear about its use of the term "operational," since the term has a wide range of meaning. For example, both National Meteorological Services and the World Meteorological Organization are operational entities, though their day-to-day roles and responsibilities are quite different. For the purposes of GEO, we believe that the term "operational" should be defined as enabling the sustainable provision of routine EO information products for both daily and long-term societal decision making.

- While internal governance issues should be subsidiary, an effective secretariat director and small, expert secretariat with strong links to other experts in SBA areas are essential. This staff can work alongside GEO stakeholders to build GEOSS which should be built "from the bottom upward," on the basis of strong, valued, and unique projects showing the benefit of GEO.

- GEO's effectiveness and its relations with organizations such as CEOS could be improved if its organizational form followed more closely its functions. GEO first ought to recognize and define what it can do, what its ambitions and deliverables are, and then allow these criteria to determine decisions on its governance and organization.

- For GEO's focus on data sharing to fully benefit Governments, stakeholders and users, its Members must undertake meaningful and practical steps to release previously unavailable data sets into the GEOSS Data-CORE. The GEOSS Data Sharing Principles should provide the impetus for a Data Democracy approach, ensuring timely access to key datasets and associated tools for the development of capacity worldwide in the use of EO from space. GEO's promotion of complementary systems for EO data/information services, including GCI, Data-CORE and GEONETCast, is closely aligned with this approach, and should be developed and advocated much more fully than heretofore. As far as space data are concerned, CEOS contributes to these principles through its Virtual Constellation portals and also its Calibration/Validation, Information Systems and Services, and Capacity Building and Data Democracy Working Groups which aim to provide easy access to

validated Earth observation data. This is an important aspect of the interaction between GEO and CEOS that can certainly be improved in the future.

- GEO has a critical role to play in capacity building in relation to developing countries and the transfer of geospatial technologies to them, both directly and in partnership with relevant development agencies, including intergovernmental and those national agencies associated with GEO Members. Key to its success will be networking efforts in a much broader acquisition and sharing of EO data, processing/applications technology, and scientific and technical expertise. The CEOS Working Group on Capacity Building and Data Democracy is prepared to work closely with GEO in coordinating such activities with respect to space-based observations.

- As part of the GEO community, CEOS recognizes the need for closer coordination and integration among space-based and *in-situ* assets.

- CEOS believes that GEO can and should focus more attention on consultations and coordination in invigorating its Communities of Practice to support the objectives of an effectively coordinated GEO Work Plan.