

Extract from the GEO Work plan 2006 here: Architecture and data Committee

Disaster:

DI-06-01: Encourage in-situ and space agencies to (i) systematically record data over coastal regions subject to tsunami risk, and (ii) archive data in a form easily accessible to all countries.

[MBR/ORG] (CEOS, ICSU/WDCS, GOOS, WMO, GLOSS, FDSN, GEO Member(s) TBD) To be initiated in 2006

DI-06-02: Facilitate improvement of capabilities for global seismographic networks such as GSN, FDSN, DAPHNE, and data sharing among GEO members.

[MBR/ORG] (FDSN, GEO Member(s) TBD) To be initiated in 2006

DI-06-04: Promote and facilitate free and unrestricted exchange of all Earth observation data relevant to tsunami early warning systems.

[SEC] (in coordination with the Architecture and Data Committee) To be initiated in 2006

DDI-06-11: Explore possibilities for the development of an international charter on telecommunication systems and disasters, building upon the experience of the International Charter on Space and Major Disasters.

[SEC] To be initiated in 2006

DI-06-13: Initiate a globally coordinated warning system for fire and monitoring for forest conversion, including the development of improved information products and risk assessment models.

[MBR/ORG] (GTOS/GOFC-GOLD, GEO Member(s) TBD) To be initiated in 2006

Climate:

CL-06-02: Establish actions securing the provision of key data for climate studies and forecasting from satellite systems.

[MBR/ORG] (GCOS, CEOS, WCRP, GEO Member(s) TBD) To be completed in 2006

Water:

WA-06-04: Facilitate the development of a global dataset that maps catchments to the first and second order stream level for use in applying land cover data to management of catchments and monitoring the hydrological cycle.

[MBR/ORG] (UNESCO-IHP, FAO-GTOS, GCOS, GEO Member(s) TBD) To be initiated in 2006

WA-06-05: Initiate the creation of a coordination mechanism within GEO for global in-situ water observations, including ocean observations, and advocate synergy and sharing of infrastructure among observing systems.

[MBR/ORG] (GTOS, WMO, GOOS, POGO, IGOS/IGWCO) To be initiated in 2006

Weather:

WE-06-01: Advocate a complete and stable surface-based (in-situ and airborne) Global Observing System (GOS). High priority should be given to a stable and fully functional World Weather Watch Upper Air Network and the further development of the Aircraft Meteorological Data Relay (AMDAR) programme.

[MBR/ORG] (WMO) To be completed in 2006

WE-06-02: Advocate a stable and improved space-based Global Observing System (GOS) including operational geostationary and polar components. Support WMO efforts related to (i) increased spatial and temporal resolution for geostationary imagers and sounders and (ii) a broader availability of polar Doppler wind profiles for initial operational testing.

[MBR/ORG] (WMO, CEOS) To be completed in 2006

WE-06-04: Support the development of Advanced Dissemination Methods (ADMs) within an operational Integrated Global Data Dissemination Service (IGDDS), as a component of WMO Information System (WIS) and a contribution of the WMO Space Programme to GEO-Netcast.

[MBR/ORG] (WMO) To be completed in 2006

Agriculture:

AG-06-04: Initiate an international assessment effort on forests and forest changes utilizing ongoing land cover mapping projects (e.g. GLOBCOVER). Ensure application of standardized classifications and harmonization of existing datasets.

[MBR/ORG] (GTOS/GOFC-GOLD, FAO, GEO Members(s) TBD) To be initiated in 2006

Biodiversity:

BI-06-05: Facilitate the interoperability of the multi-institutional biodiversity observation network and ensure that it links to data sets of ecological and other related observation systems.

[MBR/ORG] (GBIF, GEO Member(s) TBD) To be initiated in 2006

Architecture:

AR-06-01: Establish and maintain a process for reaching interoperability arrangements, informed by ongoing dialogue with major international programmes and consortia. That process is to be sensitive to technology and accessibility disparities among GEO Members and Participating Organizations, and must include mechanisms for upgrading arrangements.

[Architecture & Data Committee] To be completed in 2006

AR-06-02: Produce practical strategic and tactical guidance document on how to converge disparate systems to a higher degree of collaboration and interoperability under GEOSS including its roadmap and using existing efforts wherever possible.

[Architecture & Data Committee] To be completed in 2006

AR-06-03: Reach consensus on how the GEOSS architecture will link the components of GEOSS and allow for growth potential.

[Architecture & Data Committee] To be initiated in 2006

AR-06-04: Establish a process for GEO Members and Participating Organizations to commit component systems to GEOSS, and advocate specific initial commitments of contributed systems and other components, including agreement to accept GEOSS interoperability specifications as defined to date, and allowing for growth.

[Architecture & Data Committee] To be initiated in 2006

AR-06-05: Initiate development of a publicly accessible, network-distributed clearinghouse, subject to GEOSS interoperability specifications to date, and including an inventory of existing data, metadata, and pre-defined common products.

[Architecture & Data Committee] To be initiated in 2006

AR-06-06: Facilitate interoperability among Digital Elevation Model (DEM) data sets with the goal of producing a global, coordinated and integrated DEM.

[Architecture & Data Committee] To be initiated in 2006

AR-06-07: Produce an inventory of existing in-situ observation networks (including airborne), beginning with the networks of GEO Members and Participating Organizations, and associate them with societal benefit areas as appropriate.

[Architecture & Data Committee] To be initiated in 2006

AR-06-08: Advocate additional resources for the maintenance and expansion of in-situ observing systems in cooperation with major national and international organizations and programmes.

[SEC] To be initiated in 2006

AR-06-09: Advocate establishing continuity for near real-time, 30-m (or better) resolution, multi-spectral remote-sensing coverage everywhere on the Earth's surface, including support for the launch of a Landsat-equivalent follow-on mission.

[MBR/ORG] (CEOS) To be initiated in 2006

AR-06-10: Advocate and facilitate the timely implementation of the Global Precipitation Measurement (GPM) mission and encourage more nations to contribute to the GPM constellation.

[MBR/ORG] (CEOS) To be initiated in 2006

AR-06-11: Prepare a series of appropriate advocacy activities, including representations to the International Telecommunication Union. For example, evaluation of challenges presented by the industrial development of automobile anti-collision radar and the implications for the use of radio frequencies essential for tropospheric sounding.

[MBR/ORG] (CEOS, WMO, in cooperation with the Science and Technology Committee) To be completed in 2006

Data Management:

DA-06-01: Invite experts to identify steps required to further the practical application of the agreed GEOSS data sharing principles.

[Architecture & Data Committee] To be initiated in 2006

DA-06-02: Develop a GEO data quality assurance strategy, beginning with space-based observations and evaluating expansion to in-situ observations, taking account of existing work in this area.

[Architecture & Data Committee] To be initiated in 2006

DA-06-04: Facilitate the development, availability and harmonization of data, metadata, and products commonly required across diverse societal benefit areas, including base maps, land-cover data sets, and common socio-economic data.

[User Interface Committee, Architecture & Data Committee] To be initiated in 2006

DA-06-05: Develop a guidance document for basic geographic data (including format, precision, accuracy, etc.), taking into account relevant national, regional and global initiatives.

[Architecture & Data Committee] To be initiated in 2006

DA-06-06: Advocate use of existing Spatial Data Infrastructure components as institutional and technical precedents, where appropriate, including standard protocols and interoperable system interfaces, among other components.

[Architecture & Data Committee] To be initiated in 2006

DA-06-07: Define a model web portal system for access to all Earth observation data, based on existing portals and systems, designed to increase use, quality, and accessibility of existing information, tools, and networks. Particular attention will be given to the coordination of networks in specific societal benefit areas to enable reuse thereby to achieve synergy and leverage.

[SEC] (in cooperation with the Architecture & Data Committee) To be completed in 2006

DA-06-08: Develop learning tools (based on existing tools) to improve technical capability to (i) create common geo-referenced maps, (ii) merge socio-economic data using geographic information systems (GIS), and (iii) combine geo-referenced maps with application tools to yield basic information systems.

[Architecture & Data Committee] To be completed in 2006

DA-06-09: Establish GEOSS Best Practices Registry by a request for proposals from GEO organizations willing to maintain/update GEOSS Best Practices Registry. The registry should also include existing cost-benefit sharing mechanisms and examples (data sharing, cooperative data acquisition, joint development, joint flight, collaborative sciences, etc).

[Architecture & Data Committee] To be completed in 2006