

THE GEO INITIATIVE IS UNDERWAY

Outcomes of GEO meetings in year 2005: GEO-6, Earth Observation Summit-III, and GEO-I

Tobias FUCHS

European Commission DG Research Dir. I (Environment Research) Brussels BELGIUM



The ad hoc GEO Meetings

- GEO-6 (February 14-15, 2005, Brussels, Belgium)
 - Preparation of Third Earth Observation Summit (EOS-III)
 - Approval of draft GEOSS 10-Year Implementation Plan
 - Acceptance of Accompanying Reference Document
 - Approval of draft EOS-III resolution
 - Drafting of a Tsunami Communique



The ad hoc GEO Meetings

- GEO-6 (February 14-15, 2005, Brussels, Belgium)
 - Forward planning
 - Assent to GEO-WMO Standing arrangement
 - Assent to GEO Secretariat transition
 - Assent to 2006 Work Plan Development document
 - Agreement on Executive committee options
 - Guidance on Long Term Funding
 - Guidance on Science and Technical Advice Mechanism and on User Interface Mechanism







- Date: February 16, 2005, Brussels, Belgium
- Participation:

55 GEO member countries and EC, and 41 international organizations (including UNFCCC)

- -> 2/3 increase in member countries and 100 % increase in part. organisations compared to EOS-I
- -> 50 % of the members are from developing countries

GROUP ON EARTH BSERVATIONS

The Earth Observation Summit III

- Argentina
- Algeria
- Australia
- Belgium
- Belize
- Brazil
- Cameroon
- Canada
- Chile
- China
- Croatia
- Cyprus
- Denmark
- Egypt
- European Commission, co-chair
- Finland
- France
- Germany
- Guinea-Bissau

- Greece
- Honduras
- India
- Indonesia
- Iran
- Ireland
- Israel
- Italy
- Japan, co-chair
- Kazakhstan
- Luxembourg
- Malaysia
- Mali
- Mexico
- Morocco
- Nepal
- Netherlands
- New Zealand

- Niger
- Nigeria
- Norway
- Portugal
- Republic of the Congo
- Republic of Korea
- Russian Federation
- Slovak Republik
- South Africa, co-chair
- Spain
- Sudan
- Sweden
- Switzerland
- Thailand
- Tunisia
- Ukraine
- United Kingdom
- United States, co-chai
- Uzbekistan

GROUP ON EARTH BSERVATIONS

The Earth Observation Summit III

- African Association of Remote Sensing of the Environment (AARSE)
- Association for the Development of Environmental Information (ADIE)
- Asia-Pacific Network for Global Change Research (APN)
- Central American Commission for the Environment and Development (SICA/CCAD)
- Committee on Earth Observation Satellites (CEOS)
- European Centre for Medium-Range Weather Forecasts (ECMWF)
- European Environmental Agency (EEA)
- European Space Agency (ESA)
- European Sea Level Service (ESEAS)
- Network of European Meteorological Services/Composite Observing System (EUMETNET/EUCOS)
- European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)
- The Association of the Geological Surveys of the European Union (EuroGeoSurveys)
- Food and Agriculture Organization of the United Nations (FAO)
- Federation of Digital Broad-Band Seismograph Networks (FDSN)
- Global Climate Observing System (GCOS)
- Global Ocean Observing System (GOOS)
- Global Spatial Data Infrastructure (GSDI)
- Global Terrestrial Observing System (GTOS)
- Institute of Electrical and Electronic Engineers (IEEE)
- Integrated Global Observing Strategy Partnership (IGOS-P)

- Intergovernmental Oceanographic Commission (IOC)
- International Association of Geodesy (IAG)
- International Council for Science (ICSU)
- International Geosphere-Biosphere Program (IGBP)
- International Group of Funding Agencies for Global Change Research (IGFA)
- International Institute of Space Law (IISL)
- International Council on Systems Engineering (INCOSE)
- •International Steering Committee for Global Mapping (ISCGM)
- International Strategy for Disaster Reduction (ISDR)
- •International Society for Photogrammetry and Remote Sensing (ISPRS)
- •Open Geospatial Consortium (OGC)
- Partnership for Observation of the Global Ocean (POGO)
- South Pacific Applied Geoscience Commission (SOPAC)
- UN Convention on Biodiversity (UNCBD)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Environment Programme (UNEP)

•United Nations Framework Convention on Climate Change (UNFCCC)

- •United Nations Institute for Training and Research (UNITAR)
- United Nations Office for Outer Space Affairs (UNOOSA)
- World Climate Research Programme (WCRP)
- World Meteorological Organization (WMO)



Summit Resolution

- Endorsed the 10 year Implementation plan as the basis for its further development and for establishing GEOSS;
- <u>Noted</u> with appreciation the <u>GEOSS reference</u> <u>document</u> supporting the 10 year plan;
- Established intergovernmental Group on Earth Observations (GEO) as successor of ad hoc GEO in order to implement GEOSS;
- <u>Encouraged governments</u> of all UN member states <u>to participate in GEO;</u>
- Invited all relevant international organisations to encourage and assist GEO in its work.



Summit Resolution

- Affirmed **intention to provide necessary support** for execution of the GEOSS 10 year implementation plan;
- Resolved to <u>meet again</u> at an Earth Observation Summit <u>until end of 2007</u>.

Summit Communique

• <u>Support for Tsunami and multi-hazard early</u> <u>warning systems</u> within context of GEOSS.



The GEO Meetings

- **GEO-I** (May 3-4, 2005, Geneva, Switzerland)
 - Opening of new GEO Secretariat offices at WMO in Geneva





The GEO Meetings

- **GEO-I** (May 3-4, 2005, Geneva, Switzerland)
 - <u>Decision on</u> structure and composition of the <u>GEO</u>
 <u>Executive Commitee</u> and election of the committee;
 - Discussion of proposals on User Interface Mechanism and on Science and Technical Advisory Mechanism;
 - <u>Review</u> of GEO secretariat transition <u>funding</u>
 <u>requirements and contributions</u>;
 - <u>Review</u> of the progress on the <u>GEO secretariat transition</u>, <u>GEO secretariat director recruitment</u> process, and the <u>2006 Work Plan preparation</u>.



GEO Executive Committee

- Facilitates work of GEO in between plenary meetings
- 12 Members elected for 2 years term
- Regional representations:
 - Africa (2)
 - Americas (3)
 - Asia and Oceania (3)
 - CIS (1)
 - Europe (3)
- Elected by regional caucuses



GEO Executive Committee

Africa Europe CIS - European – Morocco – Russia Commission* - South Africa* - Germany - Italy Americas Asia – Brazil - China* *indicates – Honduras – Japan Co-Chair – United States* – Thailand



GEO Executive Committee

- <u>4 Co-Chairs</u>
 - Elected by Plenary from Executive Committee members;
 - 2 from Developing Countries, 2 from Developed Countries:
 - Zheng Guoguang China;
 - Achilleas Mitsos European Commission;
 - Rob Adam South Africa;
 - Conrad Lautenbacher United States.



GEO challenges in year 2005 until GEO-II

- Development of the GEO Work Plan for 2006;
- GEO members to provide resources for operation of the GEO Secretariat in 2005 and 2006;
- Appointment of the new GEO Secretariat director and recruitment of GEO secretariat staff;
- Installation of a S+T Advice and User Interface mechanism;
- Attracting new GEO member countries!!!

-> GEO-II meeting planned for Dec 14 and 15 2005 (tbc) in Geneva to discuss and decide on GEO Work plan for 2006 and related budget.



Contributions of Europe to GEOSS

Results of EU environment research supported by FP6/FP7

- EU research activities supporting GEOSS implemention in the nine socio-economic benefit areas based on integrated EO data
 -> 4th FP6 call on Environment RTD to be published 19 July 2005
 - -> special Work Programme of FP7 priority area 'Environment (incl. climate change)' is in preparation

Global Monitoring for Environment and Security (GMES)

 Joint initiative of EC and ESA developing operational user driven services based on integrated EO data in order to support decision making on environment and security

-> The observation component of GMES will constitute a major European contribution to GEOSS



More information

- Group on Earth Observations (GEO): (-> download of GEO documents) http://earthobservations.org
- EU environment research: http://www.cordis.lu/sustdev/environment/
- Global Monitoring for Environment and Security (GMES): http://www.gmes.info/
- EU Point of contact:

Tobias Fuchs, email: tobias-berthold.fuchs@cec.eu.int