



INTERNATIONAL YEAR OF PLANET EARTH 2007-2009

Status Report

3 November 2006

Evolution of an idea

The idea of an International Year of Planet Earth was launched in 2000 at an IUGS Council meeting. Proclamation of an International Year was seen as a potentially powerful means of demonstrating how society could profit from the accumulated knowledge of the solid Earth as part of System Earth. Following a feasibility study, immediate support was provided by UNESCO's Earth Science Division, making it a joint initiative by IUGS and UNESCO (Initiators). After broad consultation, it was decided in 2002 to seek proclamation of the International Year of Planet Earth by the General Assembly of the UN, with a view to providing the best possible exposure to national governments.

On August 26, 2004, the joint Council of IUGS and the International Geological Congress, together representing Earth science communities in 140 countries and regions, adopted a Declaration on the International Year. This invited UNESCO's Executive Board to adopt an International Year of Planet Earth, considering that:

- the geosciences can contribute significantly to a safer, healthier and wealthier world;
- this potential contribution is seriously under-used by society and should be substantially increased;
- Proclamation of an international year under the aegis of UN member states would help the Earth sciences to make their full contribution to the sustainable stewardship of the planet.

Proclamation of 2008 as the International Year of Planet Earth was effected at the UN General Assembly in New York on 22 December 2005. At least three years will be needed to realize most of the ambitious science and outreach plans, and the Year's triennium will thus run from 2007 to 2009.

Science Programme

A Science Programme Committee (SPC) developed its Terms of Reference in 2002. Ten broad Themes provide the operational framework of the Year's Science programme. Brochures were written by specialists and are available in both printed and electronic forms. Printing of the brochures has been made possible by the generosity of several European geological surveys (Austria, Finland, Ireland, Norway, Spain, and Sweden), Ministries, national scientific bodies, and UNESCO. All brochures may be downloaded from www.yearofplanetearth.org.

Implementation of the science programmes will closely resemble the successful International Geoscience Programme (IGCP), another joint IUGS/UNESCO Programme. The Year's science programme will operate essentially in 'bottom-up' mode inviting scientists to submit proposals for the 10 science Themes, preferably addressing the 'key questions' mentioned in the science brochures, through Expressions of Interests (EoI's). These EoI's and subsequent proposals will be evaluated by Science Implementation Teams (SITs), one for each of the Themes. These SITs are normally composed of 8 experts and will become effective in October 2006.

SIT membership includes:

Theme	SIT Leader	SIT Members
Groundwater	Hill (USA)	Struckmeijer (Ge), Adelana (Nig)
Climate	Dodson (UK)	Alverson (USA), Nield (UK), Yuan (Cn), Yim (CN), Wigand (Ge), Larocque (Ca), Meadows (SA)
Earth & Health	Selinus (Se)	Centeno (USA), Finkelman (USA), Weinstein (Au), Derbyshire (UK), Manay (Ur), Gogan (Tu), Davies (Ta)
Deep Earth	Cloetingh (NI)	Mulugeta (Et), van der Pluijm (USA), Friedrich (Ge), Gabrielsen (No), Roure (Fr), Ludden (UK), Zoback (USA)
Megacities	Kraas (Ge)	Nennonnen (Fi), Marker (UK), de Mulder (NI), Coy (Au), Aggarwal (In), Xue (Cn), Yu (Ko)
Resources	Sinding-Larsen (No)	Shields (USA), Gleditsch (No), Ekdahl (Fi), Mienert (No), Cherkasov (Ru), Kouda (Jp), Persson (Sw)
Hazards	Beer (Au)	Marsh (UK), Bobrowsky (Ca), Chadka (In), Cutter (USA), Pagliai (It), Supharatid (Th), Wu (Cn)
Ocean	Chen (Cn)	Lin (USA), Fischer (USA), Devey (Ge), Whitmarsh (UK), Cannat (Fr)
Soil	Hartemink (NI)	Nortcliff (UK), Frossard (Sw), Boettinger (USA), McBratney (Aus), Mendonca-Santos (Br), Zhang (Cn)
Earth & Life	Reichenbacher (Ge)	Blieck (Fr), Hartzhauser (Au), Mocanu (Ro), Shen (Cn), Codrea (Ro), Talent (Aus), Liebermann (USA)

Outreach Programme

The Outreach Programme Committee has developed a website (www.yearofplanetearth.org), produced flyers, and released thousands of general information brochures, leaflets (in many languages) and, with the kind assistance of the Chinese Ministry of Land and Resources, a dedicated brochure. The outreach programme will essentially operate in a 'bottom-up' mode as well. Individuals and organisations are invited to submit EoI's, followed by proposals for realization through the Year.

Implementation of the outreach programme will be undertaken largely at national levels. Countries and regions are encouraged to develop their own outreach programme. Some examples of the outreach programme are given below:

- Release of 4,567 bio-degradable balloons, each representing 1 My of Earth history, by India President and in London UK in January '07.
- Top Conferences with politicians, scientists and representatives of industry evaluating options for a better use of Earth science for solving societal problems. First World Top Conference in Paris, February 2008.
- Transparent Earth, through 1:1 M World digital geological map, spearheaded by BGS, supported by all geological surveys and CGMW
- World Mining Ministers Forum, March 2008, Toronto, Canada
- Smithsonian World Soil Exhibition, Washington, USA, roving
- DVD on sustainable mineral exploration (IAGOD, SGA)
- TV Documentary on Earth Sciences (AGI)
- International Conference on Indigenous geo-knowledge and geoscience
- Musical Symphony: Planet Earth, China
- Issue of Geo-Poetry booklet
- Planet Earth ringtones

- International Congresses with focus on IYPE in IUGG (2007), IGU (2008), GSA (2008), IUGS (2008), et cetera.
- First world conference of Young Earth Scientists (YES), 2008
- Development of International Standards in Geo-Information (CGI)
- Quality control Medical Geology terminology (IAMG)
- Launch of International Consortium of Urban Geoscientists
- Creation of Institute on Earth Science for Underground Cities
- Structural & Plate Kinematics Map of the World (1:50 M, CGMW)
- Metallogenic and Geological Map of Middle East (1:5 M, CGMW)

Moreover, many national initiatives are being developed, including:

- 18-wagon Years train crossing the Indian subcontinent (India)
- Exposure by national science congresses (India, Hungary, Bulgaria, etc.)
- Research grants for geoscientists from less developed countries (Austria)
- Intelligent People Approach versus Intelligent Design (Austria)
- Books, journals and articles (UNESCO, Nature, Germany, Canada, Netherlands, France, Bulgaria)
- Issue of IYPE stamps (Australia, Netherlands)
- Launch of a Springer Journal “Geoheritage”
- Wine & Earth excursions (Australia)
- Geo-bus and –truck tours (Austria, Netherlands)
- Exhibitions (Netherlands, USA, Austria, Germany, Iran, Canada)
- New Earth Science Museum (Brazil)
- Teaching courses for journalists and teachers (Tanzania, Germany, IGEO)
- Geoparks (China, Austria, Switzerland, Iran, Germany)
- Geotourism Conference, Australia 2008
- World Landslide Forum, Japan 2008
- 3rd UNESCO Geoparks Conference, “Terra Vita”, June 2008, Germany
- Lecture tours and excursions (Austria, Netherlands, France)
- New Year Concert in Museum (Austria)
- Art competitions (Austria)
- Advertisement panels in subways and on trains (Austria)
- Interactive website and maps (Austria)

Advisory Group

Individuals wishing to contribute to the Initiative and to support various activities through the science and/or outreach programmes may be invited to become Senior Advisers. The individuals making up this group will advise the MT concerning specific contributions to the activities for the Year. Senior Advisers are entitled to represent the International Year and are encouraged to publicise the Initiative as widely as possible. Currently there are 47 such Senior Advisors.

A small number of highly distinguished individuals have agreed to serve as Goodwill Ambassadors for the Year. These include people with prominent media profiles in the world’s major language areas, who are willing to promote the Year and its activities. Patrons include Heads of State and other World leaders who have expressed their willingness to give their patronage to the International Year. By October 31st, four Patrons have

accepted our invitation: Sam Nujoma, Founding President of the Republic of Namibia and Benjamin W. Mkapa, until 2006 President of the United Republic of Tanzania, Sir Mark Moody Stuart, President of the Board of Anglo-American, and Ruud Lubbers, former Prime Minister of the Netherlands.

Geoscientific Support, Partners

By mid 2003, the International Union of Geodesy and Geophysics (IUGG) and the International Geographical Union (IGU) joined this initiative as *Founding Partners*, a move soon followed by the International Lithosphere Programme (ILP), the International Union of Soil Sciences (IUSS) and ISRIC - World Soil Information. Other such Partners are the Geological Society of London and the Geological Survey of the Netherlands (TNO). A consortium of three geoscientific associations/societies, affiliated to IUGS (IAEG, ISRM and ISSMGE) joined by Mid March 2005, the International Union for Quaternary Research (INQUA), the American Geological Institute (AGI) by mid June, the American Association of Petroleum Geologists (AAPG) by late June, and the American Institute of Professional Geologists (AIPG) by early October 2005, when access to Founding Partnership was closed.

Together with the Initiators, the 12 Founding Partners constitute the backbone of the Year. They all have a seat in the Board of the Corporation and are thus responsible for implementation of the International Year. They receive exposure through the Year's brochures, the Business Plan, the website and all other official publications of the International Year.

Associate Partners have actively supported the International Year of Planet Earth before implementation. They were invited to participate and bear co-responsibility in the Science Teams securing representation of their scientific interests within the Year's Science programme. Associate Partners also have access to the outreach activities and may suggest such activities to the Outreach Programme Committee. By February 2006, access to Associate Partnership was closed and the final composition was assessed at 26 (listed below):

ICSU	International Council for Science
IOC	Intergovernmental Oceanographic Commission of UNESCO
IPA	International Permafrost Association
IAGOD	International Association on the Genesis of Ore Deposits
SEG	Society of Economic Geologists
SGA	Society for Geology Applied to Mineral Deposits
IAH	International Association of Hydrogeologists
IGCP	International Geoscience Programme IGCP
EFG	European Federation of Geoscientists
AARSE	African Association of Remote Sensing of the Environment.
SCA	Science Council of Asia
ProGEO	European Association for the Conservation of the Geological Heritage
SEPM	Society for Sedimentary Geology
CCOP	Coordinating Committee for Geoscience Programmes in East and SE Asia
GSAf	Geological Society of Africa
UNU	United Nations University

AGID	Association of Geoscientists for International Development
UN/ISDR	United Nations International Strategy for Disaster Reduction
NESF	North-eastern Science Foundation (USA)
AASG	Association of American State Geologists
ISPRS	International Society of Photogrammetry and Remote Sensing
GSA	Geological Society of America
NACSN	North American Committee on Stratigraphic Nomenclature
CPC	Circum Pacific Council for Energy and Mineral Resources
IPA	International Palaeontological Association
CGMW	Commission for the Geological Map of the World

International Partners

As of March 2006 a new category of International partnership was introduced for new bodies actively supporting the ambitions of the International Year of Planet Earth upon its incorporation. *Non-commercial International Partners* contribute at least 5,000 US \$ per year over 2006 and the full triennium (2007-2009). Those preferring to enter by 2007 will contribute at least 7,500 US \$ per annum for the triennium, and the financial contribution will be at least 10,000 US \$ for 2008 and for 2009 for those entering in 2008. Rates for *commercial International Partners* are double that of non-commercial International Partners.

Political support

At a high-level information meeting held at UNESCO headquarters in Paris on the 11th of February 2004, six nations (China, Russia, Brazil, Argentina, Italy and Jordan) agreed to support proclamation of the International Year of Planet Earth once it had been formally proposed in the General Assembly of the UN. A Draft Resolution, proposed by the United Republic of Tanzania, was adopted (unopposed) by UNESCO's Executive Board on April 28th 2005. There, 25 nations (Tanzania, Brazil, China, Burkina Faso, Turkey, Egypt, Ghana, Jamaica, Slovenia, Sri Lanka, Pakistan, Kenya, Ukraine, Algeria, Morocco, Russian Federation, Mozambique, Germany, Swaziland, Rwanda, Senegal, Mauritius, Italy, Namibia and Canada) voiced their full support, bringing the number of supporting nations at 36.

Adoption of a Draft Resolution on proclamation of 2008 as the International Year of Planet Earth by UNESCO's 33rd General Conference in October 2005 added another 15 nations (Afghanistan, Botswana, Chile, D.R. Congo, Costa Rica, Cuba, Indonesia, Nigeria, Philippines, Portugal, South Korea, Spain, Sudan, Togo and the United States of America). With the United Republic of Tanzania again taking the lead of a core group of 82 nations, a Draft Resolution was adopted without opposition by the 2nd Committee of the General Assembly on 11 December. UN proclamation of the International Year of Planet Earth, 2008 (Resolution 60/192) then followed by consensus in the General Assembly in its 68th plenary meeting, on 22 December 2005.

Resolution 60/192 reads as follows:

The General Assembly,
Reaffirming Agenda 21, the Plan of Implementation of the World Summit on Sustainable Development ('Johannesburg Plan of Implementation') and the Hyogo Framework of Action 2005-2015,

Noting that the wealth of scientific information available on planet Earth remains largely untapped and hardly known to the public or to the decision makers,
Convinced that education in Earth sciences provides humankind with tools for the sustainable use of natural resources and for building the scientific infrastructure essential for sustainable development,
Welcoming the decision of the General Conference of the United Nations Educational, Scientific and Cultural Organization to support the declaration of 2008 as the International Year of Planet Earth with a view on highlighting the importance of Earth sciences,
Taking into account the crucial role the Year could play, inter alia, in raising public awareness of the importance for sustainable development of the Earth processes and resources; disaster prevention, reduction and mitigation; and capacity-building for the sustainable management of resources; and its important contribution to the United Nations Decade of Education for Sustainable Development,

1. *Decides* to declare 2008 the International Year of Planet Earth;
2. *Designates* the United Nations Educational, Scientific and Cultural Organization as the lead agency and the focal point for the Year to organize activities to be undertaken during the Year, in collaboration of the United Nations Environmental Programme and other relevant entities of the United Nations system, as well as the International Union of Geological Sciences and other Earth science societies and groups throughout the world, and in this regards agrees that the activities of the International Year of Planet Earth will be funded from voluntary contributions, including inter alia, from industry and major foundations mobilized by a consortium of international organizations, led by the International Union of Geological Sciences;
3. *Encourages* all Member States, the United Nations system and all other actors to take advantage of the Year to increase awareness of the importance of Earth sciences for the achievement of sustainable development and to promote action at the local, national, regional and international levels;
4. *Requests* the Secretary-General to report to the General assembly at its 62nd session on the progress of the preparations for the International Year of Planet Earth.

Links with other initiatives

In 2007-2009, three other Earth-related international year initiatives will be active: the International Polar Year (IPY), the electronic Geophysical Year (eGY) and the International Heliophysical Year (IHY). In September 2005, an agreement on active cooperation and involvement in each others' science and outreach programmes was signed with the leaders of all science year initiatives ('Celimontana Declaration'). As the science programme of the International Year of Planet Earth complies closely with the priorities set by the Global Earth Observation System of Systems (GEOSS), cooperation with GEOSS was formalized on August 4.

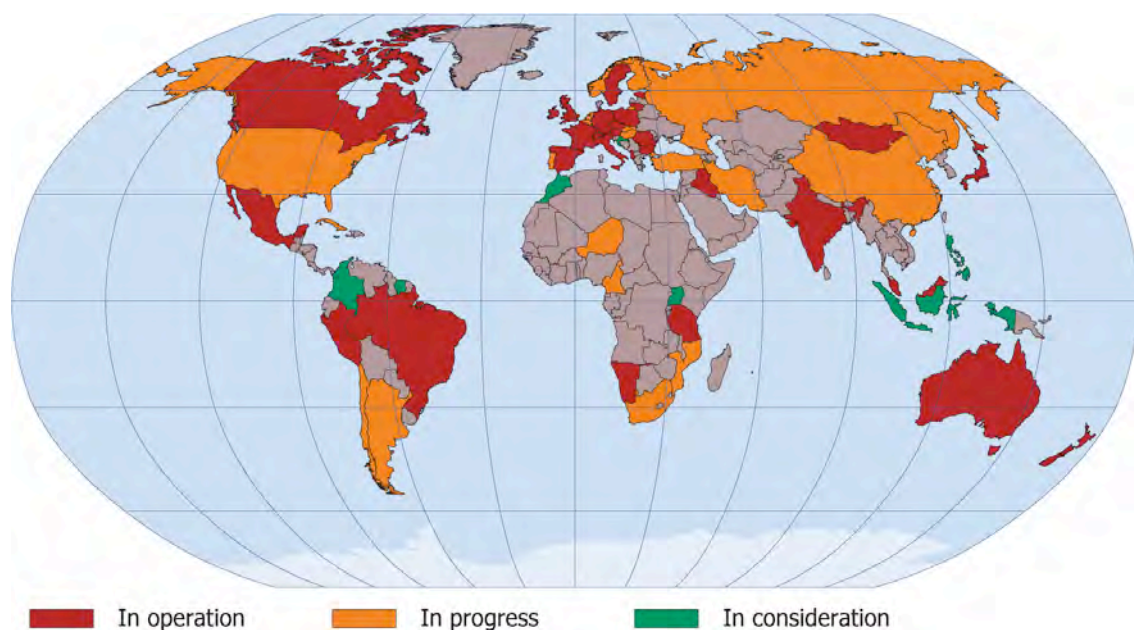
Organisation

The organisational structure of the International Year evolved as the Initiative grew in significance. By mid 2002, IUGS and UNESCO created an informal Management Team (MT) with two major constituents, the Science Programme Committee (SPC) and an Outreach Programme Committee (OPC). Regional representation was covered through China, Africa, North America and Latin America. The MT was complimented by a Treasurer and a liaison with UNESCO.

The MT was replaced by a Board of Officers upon the Year's registration as a not-for-profit 501 (c) (3) corporation under the law of the State of Delaware (USA), on March 16, 2006. Until appointment of the Chair of the Board, foreseen by late 2006, the Initiators invited members of the former MT to act as Officers of the Board, which also included representatives of IUGS and UNESCO. The Corporation is an independent body controlled by the Initiators, Founding Partners and main sponsors, as secured in the Year's statutes. Tax exemption is currently being applied for. All major stakeholders will be represented in the Board, responsible for (strategic) decision-making. Day-to-day operations will be conducted through the Secretariat. The International Year of Planet Earth has been placed under the patronage of UNESCO and UNEP as the UN's Executive Agencies.

National Committees

Implementation of the Year's ambitions will be on international and national levels. To that end, National Committees of the Year of Planet Earth have been launched, or are in the process of being launched. By October 31st 2006, National Committees are operational in 29 countries: Australia, Albania, Austria, Brazil, Bulgaria, Canada, Czech Republic, Estonia, France, Germany, India, Iraq, Ireland, Italy, Japan, Lithuania, Malaysia, Mexico, Mongolia, Namibia, New Zealand, Peru, Poland, Romania, Spain, Sweden, Switzerland, Tanzania and UK. Twenty more nations, including Argentina, Belgium, Cameroon, Chile, China, Cuba, Finland, Hungary, Iran, Mozambique, the Netherlands, Nigeria, Norway, Portugal, Russia, Slovak Republic, South Africa, Turkey and USA, are well under way in creating such committees, while some 10 other nations seriously consider doing so. Through Memoranda of Understanding, the national initiatives are linked to the Corporation.



Financial aspects

Attainment of the aims and objectives of the Year will depend upon attracting substantial financial income from a variety of sources around the world. Financial contributions in cash allocated to the budget in the years 2001-2005, reached a total of US\$ 414,900, US\$ 133,000 from IUGS, 79,600 from UNESCO, and 202,300 from Founding Partners and Sponsors. In-kind support over that period may be capitalized as close to US\$ 1 M.

The targeted budget of US\$ 20 M for the *Implementation* of the International Year for the international corporation is summarized below. As a minimum, a budget of US\$ 5 M would be required.

Amounts in US\$	Science	Outreach	Bureau
Year 1	200,000	2,250,000	450,000
Year 2	3,500,000	3,750,000	600,000
Year 3	5,300,000	3,000,000	700,000
Year 4	0	0	250,000
Total	9,000,000	9,000,000	2,000,000

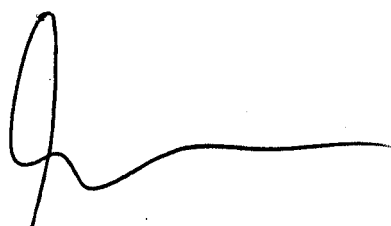
An amount of US\$ 100 - 200 M is foreseen to be raised jointly by the about 50 National Committees.

After completion of the triennium, a period of 6 months (Year 4) is required for 'winding up' activities and to report to the stakeholders, the United Nations General Assembly and the many geoscience communities involved. Only after that process has been completed will it be possible to analyse the output of the Year and to 'anchor' it in the relevant organisations.

Three potential main sources of financial support may be identified:

1. Multinational industry (private companies)
2. Multinational intergovernmental institutions/Development Banks/science organisations (donor organisations)
3. National/regional/local governmental & non-governmental organisations (private companies and donor organisations)

Contributions from these bodies are anticipated both 'in kind' and in cash. UN-proclamation was a prerequisite for the fund-raising campaign of the International Year, which was launched following formal notification of the proclamation.



*The Board of Officers of the International Year of Planet Earth,
Eduardo F.J. de Mulder, Acting Chair*