

**INTERNATIONAL UNION OF GEOLOGICAL SCIENCES  
58<sup>TH</sup> EXECUTIVE COMMITTEE MEETING**

**MARCH 17-21, 2008**

**Kenzi Farah Hotel,  
Marrakech, Morocco**

**Official Minutes**



## **58<sup>th</sup> IUGS Executive Committee Meeting Participants**

### **IUGS Executive Members**

Zhang Hongren, President  
Peter Bobrowsky, Secretary General  
Antonio Brambati, Treasurer  
Sylvi Haldorsen, Vice President

Eldridge Moores, Vice President  
Mikhail Fedonkin, Councilor  
Marta Mantovani, Councilor  
Ryo Matsumoto, Councilor

### **Observers**

Ahmed El Hassani (Member, Hassan II Academy of Science and Technology)  
Arne Bjørlykke (President, 33rd IGC)  
Jean-Paul Cadet (Past Councilor)  
Eduardo de Mulder (Executive Director of the Secretariat of the IYPE Corporation)  
Nasser Ennih (Secretary General, Geological Society of Africa)  
Ezzoura Errami (Assistant Secretary General, African Association of Women Geologists)  
David Huntley (Recording)  
Ian Lambert (Secretary General 34th IGC)  
Anne Liinamaa-Dehls (IUGS Secretariat)  
Robert Missotten (UNESCO Ecology and Earth Sciences Division)  
Godfrey Nowlan (Chair, Publications Ctte.)  
Alberto Riccardi (Past Councilor)  
Zhenyu Yang (Editor, Episodes)

### **Regrets**

Gabi Schneider, IUGS Councilor; João Sentieiro, President FCT; Kouadio Affian, Cote d'Ivoire NC; Mr. Ceciolio Quesada, Secretary Spanish NC for IUGS

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**Hosted by the Association of the African Women Geologists**

## Table of Contents

<b>58<sup>th</sup> IUGS Executive Committee Meeting Participants .....</b>	<b>i</b>
<b>1) WELCOMING ADDRESS .....</b>	<b>4</b>
<b>2) APPROVAL OF AGENDA .....</b>	<b>4</b>
<b>3) 57<sup>TH</sup> EXECUTIVE COMMITTEE MEETING JANUARY 16-20, 2007 NARA, JAPAN .....</b>	<b>4</b>
<b>4) ANNUAL ADMINISTRATIVE AFFAIRS .....</b>	<b>9</b>
<b>5) ANNUAL REPORTS AND FUTURE PLANS OF IUGS BODIES .....</b>	<b>17</b>
5. a. Adhering Organizations.....	17
5. b. Committees.....	18
5. c. Commissions .....	22
5. d. Task Groups and Initiatives.....	27
5. e. Affiliated Organizations .....	30
<b>6) REPORTS ON CO-OPERATIVE ENTERPRISES .....</b>	<b>46</b>
6. a. Earth Sciences in UNESCO .....	46
6. b. IUGS-UNESCO International Geoscience Programme (IGCP).....	46
6. c. IUGS-UNESCO Programme on Geological Application on Remote Sensing (GARS).....	47
6. d. IUGS-IUGG International Lithosphere Programme (ILP) .....	47
<b>7) INTERNATIONAL GEOLOGICAL CONGRESS (IGC).....</b>	<b>48</b>
7. a. 33 <sup>rd</sup> IGC in 2008 .....	48
7. b. 34 <sup>th</sup> IGC in 2012.....	49
7. c. IUGS and IGC cooperation .....	50
<b>8) INTERNATIONAL COUNCIL FOR SCIENCE (ICSU) .....</b>	<b>53</b>
8. a. Relations with ICSU.....	53

8. b. ICSU Committees and IUGS representation.....	53
8. c. ICSU Grant Programme .....	53
<b>9) IUGS POLICY AND STRATEGY MATTERS.....</b>	<b>55</b>
9. a. IUGS Statutes and Byelaws.....	55
9. b. Priorities of IUGS.....	55
9. c. Financial support for access to Bureau positions .....	56
9. d. Strategic position on collaboration between IGC, IUGS and IUGS Affiliated Bodies .....	56
<b>10) INTERNATIONAL YEAR OF PLANET EARTH.....</b>	<b>59</b>
10. a. Organization and Opening Ceremony of IYPE.....	59
10. b. Science and Outreach .....	59
10. c. National Committees .....	59
10. d. Annual Report & Financial statement 2009, Budget 2009 and Fund-raising Strategy.....	61
10. f. Events in 2008 and IUGS involvement.....	61
<b>11) REQUESTS FOR FUNDING AND BUDGETS FOR2008 .....</b>	<b>63</b>
<b>12) UPDATE.....</b>	<b>63</b>
12. a. Annual Report 2006 and 2007 .....	63
12. b. IUGS Brochure and Flyers .....	63
12. c. IUGS Exhibition Stand.....	63
12. d. IUGS Exposure and Advertising Products .....	64
<b>13) FREE DISCUSSION .....</b>	<b>64</b>
<b>14) VENUES OF THE 59<sup>th</sup> and 60<sup>th</sup> EXECUTIVE COMMITTEE MEETINGS .....</b>	<b>66</b>
<b>15) OTHER BUSINESS .....</b>	<b>66</b>

## 1) WELCOMING ADDRESS

Zhang Hongren, IUGS President, opened the meeting by thanking the Moroccan hosts and other guests, including Ezzoura Errami, Ahmed El Hassani, Nasser Ennih, Arne Bjørlykke, Ian Lambert, Robert Missotten, Eduardo de Mulder, Alberto Riccardi, Jean-Paul Cadet, Godfrey Nowlan, Zhenyu Yang and others. In reply, the Director of the Ministry of Mines and Mineral Development of Morocco, addressing the Executive Committee and Observers in French, welcomed the IUGS and briefly discussed the Country's bid to host the 35<sup>th</sup> IGC (Jean-Paul Cadet translated). Peter Bobrowsky, IUGS Secretary General, also welcomed everyone to the meeting and thanked Ezzoura Errami for organizing the meeting.

## 2) APPROVAL OF AGENDA

Peter Bobrowsky then reviewed the agenda for the next five days highlighting the key issues to be addressed. This agenda was unanimously approved.

## 3) 57<sup>TH</sup> EXECUTIVE COMMITTEE MEETING JANUARY 16-20, 2007 NARA, JAPAN

### 3. a. Approval of the Nara Minutes

Peter Bobrowsky noted that after numerous revisions the Minutes for the 57<sup>th</sup> EC meeting in Nara were completed. These Minutes were unanimously approved.

### Actions arising from these Minutes

#### ACTION #1

Permanent Secretariat to obtain copies of "earth science reports" from CCOP and EuroGeoSurveys, and forward to the Secretary General: **Completed**

#### ACTION #2

EC members to contact Permanent Secretariat directly to obtain copies of IUGS and IYPE brochures: **Completed**

#### ACTION #3

Permanent Secretariat to cc: Secretary General on all letters of thanks sent to outgoing members of Task Groups, ARCs, Commissions, etc: **Pending**; a system is being developed for contacting groups, including sending Geoart cards as a thank you

#### ACTION #4

Permanent Secretariat to prepare a one page summary of key decisions completed at the 57<sup>th</sup> EC meeting in Nara, Japan by the end of January; Secretary General to review the summary before distribution to all Adhering Organizations/National Committees: **Completed**

#### ACTION #5

Secretary General should send a copy of the Annual Reports and Minutes of Annual EC meetings directly to certain granting agencies in certain countries (e.g. Science Council of Japan): **Pending**; Ryo Matsumoto to send Peter Bobrowsky names and addresses of contacts

#### ACTION #6

IUGS EC to provide IUGS plaques of appreciation to both outgoing Councillors (Cadet and Riccardi) in person when the opportunity next presents itself: **Completed**

ACTION #7

Secretary General to send a formal note to UNESCO regarding the financial relationship between UNESCO and IUGS; UNESCO debt with IUGS cannot exceed \$20,000 USD at any one time during the year: **Completed**

ACTION #8

Antonio Brambati should send an automatic update regarding membership status to the Editor of Episodes as soon as dues are paid by an Adhering Organization: **Completed**

ACTION #9

IUGS to form a Task Group (Chair is the Secretary General, other members include Secretariat, Mikhail Fedonkin, Ryo Matsumoto and Marta Mantovani) charged with developing an IUGS position statement on the functionality of multiple geoscience committees within countries: **Completed**

ACTION #10

Secretary General to approach selected Adhering Organizations to consider raising their level of membership in IUGS: **Completed**

ACTION #11

Godfrey Nowlan to examine the issue of individual memberships and table a document for discussion to the EC outlining possible solutions: **Completed**

ACTION #12

Zhenyu Yang to determine the cost of digitizing one issue of Episodes and report back to the EC as soon as possible: **Completed**

ACTION #13

Godfrey Nowlan can respond in the affirmative to Prof. Friedman regarding efforts to obtain permission to reprint his 30<sup>th</sup> IGC article elsewhere: **Completed**

ACTION #14

Godfrey Nowlan to respond directly to INHIGEO recommending that in the future their Newsletter be produced and distributed digitally: **Completed**

ACTION #15

Secretary General to contact Sinding Larsen and request a prompt reply (within the month) to the IUGS EC regarding the ARC report of CFF which was submitted to them in late 2006: **Completed**

ACTION #16

Ryo Matsumoto to Chair and complete an ARC on TGGGB (Fedonkin plus external person are part of the ARC) before next EC meeting: **Completed**

ACTION #17

Secretary General to approach TGGGB informing them that they will be reviewed by an IUGS ARC later this year; in preparation for this ARC the TGGGB should prepare a summary report of their past activities, budgets, future long term plans, etc: **Completed**

ACTION #18

Sylvi Haldorsen to contact Association of Women Geoscientists and African Association of Women Geoscientists and ask them to collaborate and organize a session for IGC in Oslo as soon as possible: **Completed**

ACTION #19

Sylvi Haldorsen to Chair a Task Group (Gabi Schneider, Eldridge Moores, Neil Williams, IUGG and others from Affiliates) to develop a strategic position on collaboration between IGC, IUGS and IUGS Affiliated Bodies; Report to be completed by 1 September: **Completed**

ACTION #20

Permanent Secretariat to send final list of co-shared meetings with IYPE and IGC to the Secretary General as soon as possible: **Completed**

ACTION #21

Secretary General to contact AEGS (Association of European Geological Societies) and tell them to enhance contact with IGEO and IYPE: **Completed**

ACTION #22

Zhang Hongren to write letter to AGA (Arab Geologists Association) to obtain clarification about their association: **Completed**

ACTION #23

Secretary General to contact AGID and ensure that they do not want money this year: **Completed**

ACTION #24

Gabi Schneider to contact CGI to ensure they are in touch with CIFEG (International Center for Training and Exchange in Geosciences) to collaborate on the upcoming workshop in Namibia: **Completed**

ACTION #25

Ed de Mulder on behalf of IYPE is to approach EASE (European Association of Science Editors) to explore if there is a role for their organization to play in IYPE: **Completed**

ACTION #26

Antonio Brambati and Secretary General to submit another version of IGCP Document C to UNESCO by the end of January 2007: **Completed**

ACTION #27

Secretary General will request a copy of the current recommendations from UNESCO regarding formation of a national committee for IGCP: **Completed**

ACTION #28

Zhang Hongren to contact UNESCO and provide the name of the IUGS representative that will represent the Union in completing IGCP Document D: **Completed**

ACTION #29

Secretary General to distribute a copy of the IUGS agreement with IUCN to the entire EC: **Completed**

ACTION #30

Sylvi Haldorsen to include an open call for bids to host the 2016 IGC in the next E-Bulletin: **Completed**

ACTION #31

Secretary General to contact Morocco and inform them that IUGS has accepted their offer to host the 2008 EC: **Completed**

ACTION #32

Secretary General to draft a letter for signature by Zhang Hongren responding to the letter for tsunami museums: **Completed**

ACTION #33

Eldridge Moores will provide a clean and final draft of the IUGS and IGC Statutes and Byelaws (this includes the combined and the two separate versions) to the IUGS EC: **Completed**

ACTION #34

Eldridge Moores to inform Arne BJORLYKKE about DOSSEC: **Completed**

ACTION #35

Each EC member should write a letter to their appropriate Commission and Affiliated Organization as appointed in the 57<sup>th</sup> meeting. EC members should copy the Secretary General on these communiqués: **Completed**

ACTION #36

Gabi Schneider and Ed de Mulder will coordinate a plan related to publications related to IYPE themes to be published by 2011 through the GSL: **Completed**

ACTION #37

Sylvi Haldorsen to inform Adhering Organizations and Affiliated Bodies that the IUGS intends to publish volumes to coincide with the 2011 Anniversary: **Completed**

ACTION #38

Secretariat to send copies of all the Task Group reports (that were used to contribute to the Mid Program Vision) to all of the EC members: **Completed**

ACTION #39

Ryo Matsumoto to explore IUGS activity collaboration with IODP: **Completed**

ACTION #40

Secretary General should respond to the IUGG and inform them of the IUGS decisions which approve appointment of Green, Cadet and Tatsumi to the ILP: **Completed**



ACTION #41

Zhang Hongren should send his letter to ICS officers (all subcommissions) and pending their reply a decision regarding financial support will then follow: **Completed**

ACTION #42

Eldridge Moores will edit the Zhang Hongren letter to be sent to ICS: **Completed**

ACTION #43

SG to write to Zhang Hongren and ask him to replace Bobrowsky on the Board of IYPE: **Completed**

## 4) ANNUAL ADMINISTRATIVE AFFAIRS

### 4. a. President's Report

Zhang Hongren opened by remarking that with rising oil prices, the world is facing higher food prices and a looming energy crisis. He cautioned that IUGS should seriously consider this situation. In previous years, Hongren presented several documents to the EC to describe his views concerning IUGS. The most important were “The priority of IUGS” and “How to better unite geological community”.

Many international organizations of science are facing financial difficulty. The only way to extricate from this difficulty is to concentrate the available resources on a limited number of priorities. The determination of priority is of crucial importance. Two years ago, Hongren presented the following matrix of priority for IUGS. He believes it is still valid:

#### IUGS Priority Matrix

	Promoting development of Earth sciences	Applying the results of Earth science studies	Strengthening public awareness of geology
Activity	IGCP	Geology For Africa	IYPE
Forum	IGC	Thematic forum for popularization	IYPE
Standard	Geological Time Scale GeoSciML	Selection of items to be disseminated	Geo-park standard
Information	Database	Case histories	Publications Websites, Network

In order to **promote the development of Earth sciences**, IUGS has tripled financial support for **IGCP**. This action greatly encouraged the world geological community. A substantial progress has been made in restructuring the IGCP in close cooperation with UNESCO. Although there are still difficulties ahead, Hongren considers that IUGS is on the right route.

**IGC** is the major forum of The Union. A great effort has been made to get consensus concerning the interrelationship between IUGS and IGC. A new draft version of both IUGS and IGC Statutes is underway. Effort has also been made to streamline the relationship between IUGS and the local host of IGC.

**Standardization** is one of the major services that IUGS can and should provide, stressed Hongren. The **International Geological Time Scale** is one of the most important traditional standards maintained by IUGS. With great patience, the long lasting problem with ICS has been basically resolved. He also mentioned that in order to keep path with the modern information technology, **GeoSciML** is under construction.

Another field where IUGS could better serve the world geological community is **database development and management**. Hongren suggested IUGS should seek ways to make the service

available not only at the high end of the technology, but also easily accessible by a wide range of geologists, especially in developing countries.

From the matrix above, it would appear that The Union should give more emphasis to achieve the aim of “**applying the results of Earth science studies**” suggested Hongren. A frequently asked question from the member countries, especially from developing countries, is "what benefit we can get from IUGS?" The popularization of already available results of the world geological community has the great potential to let large number of geologists from different countries to get the real benefit. In the future IUGS could select topics and case histories to be disseminated, organize thematic forums for popularization and so on.

**Strengthening public awareness of geology** is the third aim of IUGS, sees Hongren. He noted that the UN Resolution on the International Year of Planet Earth pointed out that The UN Encourages all member States, the United Nations system, and all other sectors 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. In February, the Global Launch Event was successfully held at the headquarters of UNESCO in Paris. IUGS will continue to support IYPE, within its ability, to make it a real success.

Hongren sees the strength of IUGS residing in its broad coverage of geological disciplines and nations, and in the support received from the world geological community. The cooperation between UNESCO and IUGS is a good example of the cooperation between an important intergovernmental organization and NGO. Both sides, as well as the whole world geological community, get great benefit from such cooperation. IYPE is a brilliant example of such cooperation.

It is not strange that different people have different points of view, Hongren noted. As the leading NGO of the world geological community, IUGS should try its best to unite geologists from different countries and different branches of geology. Among the NGOs, the only way to achieve unanimity is through consultation. IUGS must further improve our communication with other geo-scientific organizations.

Without unity of ideas, there cannot be unity of actions, Hongren warned. Without unity of actions, the major aims of IUGS cannot be achieved. The solution of the dispute about the Quaternary is a good example. Transparency and democracy are the important preconditions to achieve consensus. Hongren recommended IUGS should clearly adopt Robert Rules of Order as the basis of decision-making.

Hongren also cautioned that democracy should be combined with clearly defined responsibilities. The basic definition of responsibilities has already been defined in the Statutes and Bye-Laws of IUGS. However, the Statutes and Byelaws cannot define and predict everything. The major tasks must be delegated to constantly take care of obligations. If IUGS has a clear definition of responsibilities, the action must be systematically delegated to the appropriate person(s).

In closing, Zhang Hongren noted that although the remaining time for this term of Executive Committee was rather limited, IUGS was meeting the great events of the 33<sup>rd</sup> IGC and a number of important tasks. He ended by asking all to unite and make every effort to better serve the world geological community and the society.

#### **4. b. Vice Presidents’ and Councillors’ Reports**

#### **4. b. 1 Sylvi Haldorsen, Vice President**

Sylvi Haldorsen summarized her activities and achievements for 2007. During the year, she attended the IUGS Executive Committee meeting in Nara, Japan (January) and INQUA Congress in Cairns, Australia (August). At this meeting the IUGS poster, all important brochures and IUGS promotion articles were handed out. Haldorsen presented the opinions of the IUGS Executive Committee at the meeting on the stratigraphical rank of the Quaternary. (James Ogg represented IGC). The INQUA Terrpro – sub-commissions on loess and dust planned to apply for the establishment of a formal group in IUGS, and Haldorsen then advised them about the requirement for a commission under IUGS. Haldorsen also attended the IUGS Bureau meeting in Italy in September, and was at the International Year of the Planet Earth, Global Launch event, in February 2008.

Haldorsen noted that Bulletins 18 – 28 (11 issues) were published in 2007; the last three of these are also formatted as PDF files for the IUGS website.

Haldorsen also chaired the Nara Task Group on the relations between IUGS – IGC and the IUGS Affiliates. The work is discussed under Section 9d.

#### **4. b. 2 Eldridge Moores, Vice President**

It was another full year for Vice President, Eldridge Moores. He enjoyed the interaction with the IUGS Executive Council and other members of the IUGS community. In the past year, Moores:

- Attended all Bureau Meetings;
- Served as official liaison to the Executive Committee for several Affiliate Societies;
- Served on the IUGS-IGC Statutes and Byelaws Revision Task Group, doing much work on final drafts of the Integrated and Separate Statutes and Byelaws;
- Attended the GeoUnion meeting in Paris, where as with previous years, I took minutes;
- Worked on editing the English translation of the speech of Chinese Premier Wen Jiabao to IUGS Officers;
- Contacted and met with a lawyer specializing in not for profit organizations to learn the legal aspects of relationships between IUGS, IYPE, and IGC;

Eldridge Moores then talked more on the global problems raised by Zhang Hongren, stressing the need for more geologists because of the resource crisis. In closing, Moores suggested the need for a Commission on Sustainability.

#### **4. b. 3 Mikhail Fedonkin, Councillor**

Mikhail Fedonkin's activities related to the IUGS objectives and tasks included participation in the IUGS EC meeting in Nara, Japan, and in the following opening ceremony of the IYPE in Japan that took place on January 22, 2007, at Tokyo University. In February Fedonkin participated in the meetings of the IUGS Bureau and IGCP Scientific Boards in Paris. One of his duties after those meetings was to write the first draft of the IGCP Byelaws Documents (Part D. IGCP National Committee: Terms of Reference) that was finished by mid-April.

In August Fedonkin helped to arrange an international field trip to the Vendian fossiliferous sections on the White Sea Coast and the International Conference “The Rise and Fall of the Vendian/Ediacaran

Biota: Origin of Modern Biosphere” in Moscow. Both events related to the IGCP Project 493 which Fedonkin is leading with Australian colleagues. He mentioned three books published in English in 2007 as a result of this project – all books show the logo of IGCP and/or IUGS. One of these books, “The Rise of Animals” (John Hopkins University Press), a well illustrated popular publication oriented to a wide audience, was presented in the UNESCO magazine “World of Science”. The Symposium related to IGCP project 493 is included into the scientific program of 33<sup>rd</sup> IGC in Oslo.

In late December, Ryo Matsumoto and Fedonkin carried out an Ad hoc Review of the IUGS Task Group Global Geochemical Baselines (TGGGB) at the Federal Center in Denver, Colorado, on December 15<sup>th</sup>, 2007.

At the national level, Fedonkin discharged his obligations related to the IUGS by being a Chair of the Russian Committee on IGCP (UNESCO), a Vice-Chair of the Russian Committee of Geologists, and as a member of the IYPE National Committee. The Russian Committee on IGCP recommended top specialists as the candidates for the IGCP Scientific Board and experts for the UNESCO World Heritage mission. In February, Fedonkin gave a talk on the IGCP and IYPE to the participants of the All-Russian Congress of the UNESCO chairs in the Russian Federation in Moscow. In June, he made a presentation on the recent activity of IUGS, IGCP and IYPE for the members of the Bureau of the Earth Science Department, Russian Academy of Sciences. In late January 2007, Fedonkin was invited to report for the same Bureau on the Global Geochemical Baseline program, to consider the possibility to develop this program on the territory of Russia as a joint work of the Russian Academy of Sciences and the National Geological Survey.

#### **4. b. 4 Marta Mantovani, Councillor**

During 2007, Marta Mantovani received correspondence from the President, Vice Presidents, the General Secretary, as well as from other members of the EC. Whenever it was solicited, she responded, expressing her opinion. As a member of the Brazilian Research Council, on the Geophysics and Geodesy Committee, Mantovani always promoted the IUGS, during the Committee Meetings, reunions and in many other activities.

During the International SBGf Conference, Mantovani promoted the IUGS and distributed the printed materials and information received. She has distributed a portion of the promotional golf shirts and other promotional materials to future participants and promoters of the next IGC. As to what is concerning the IYPE, Mantovani was at the launch of the program in Sao Paulo, and also participated in two Committee meetings.

Mantovani also maintained constant contact with the Brazilian coordinator (Carlos Oiti Berbert) and she has contacted the people responsible and enlisted the help of colleagues to ensure the payment of the annual fees from Brazil for the IUGS, as adhering member.

#### **4. b. 5 Ryo Matsumoto, Councillor**

As an IUGS Councilor, Ryo Matsumoto organized an Ad hoc review committee of the Task Group-Global Geochemical Baselines led by David Smith of USGS. The Committee was held in Denver on December 15<sup>th</sup>, 2007 and ARC report was sent to relevant persons and IUGS office. TGGGB was very active, promoting the international network to establish GGB.

During the International Conferences related to IODP and deep drilling by newly built D/V Chikyu, Matsumoto promoted IUGS as an over-arching organization of earth sciences. He distributed promotional and printed materials of IUGS to international and Japanese participants. As a Chair of the Board of Governors of IODP Management International, Matsumoto promoted IUGS and IGC at the members meeting in Bremerhaven and San Francisco. Presentation from the IODP activities should be one of the highlights of IGC in Oslo, he noted. Dr. Olav Eldholm of the BoG organized a symposium "Marine geophysics: state-of-the-art and a look ahead - A tribute to Manik Talwani". Manik has been the President of IODP-MI, leading the IODP activities.

IUGS and IGC were also promoted at the annual meeting of JGU (Japan Geoscience Union) the largest geoscience meeting in Japan with more than 5000 participants.

IUGS-related activities were active in 2007 in Japan. IYPE has been very active for the last 3 years since Dr. Satoru Ohya organized an IYPE sub-commission under the IUGS National Committee within the Science Council of Japan. Matsumoto helped to establish IYPE-Japan as an implementation structure outside the Science Council of Japan for fund-raising and promotion of related activities. The IUGS National Committee holds four sub-commissions such as IYPE, ICHGS, IAGC, IAH, and ICS/SOG, supporting their activities to promote individual fields. Matsumoto reported that details of the IUGS-related SCJ activities were prepared separately as an Annual Report of Japan's National Committee of IUGS.

#### **4. b. 6 Gabi Schneider, Councillor**

Gabi Schneider could not attend, but submitted a report. During 2007, Schneider continued to be the chairperson of the Sub-Committee on IUGS of the Executive Committee of the Geological Society of Namibia, which also serves as the National Committee on IUGS. As such, she was instrumental in planning activities for the IYPE. Schneider again helped to produce a calendar to support fundraising for national activities under IYPE. The three volume book "The Geology of Namibia" was completed, and is currently with the printers. It will be launched as one of the activities of IYPE.

In February, Schneider displayed IUGS/IYPE material at the booth of the Namibian Geological Survey at the Mining Indaba in Cape Town, South Africa. Establishing contacts with the inactive members of IUGS in Africa is still a very difficult exercise, since even the newly founded Forum of African Geological Surveys (AGSF) remained inactive. Schneider did, however, have another meeting in February, 2008, in Cape Town, and will continue her efforts.

The establishment of a first Namibian Geopark received a boost when the Namibian Parks and Wildlife Management Act was passed by Parliament in December, 2007. Schneider is still aiming to have the inauguration as one of the activities of IYPE.

#### **4. c. Secretary General's Report**

Peter Bobrowsky reported that as Secretary General he participated in all the Bureau meetings in 2007. My primary responsibilities centered on the coordination of activities by the various task groups, committees, commissions, affiliated organizations and initiatives. Regular communication with the Permanent Secretariat and Bureau members for day to day business as per previous years.

In this regard much of his attention dealt with the 33rd and 34th upcoming International Geological Congresses, the IGC Committee and the International Year of Planet Earth.

From the scientific perspective the SG worked extensively mainly with two Commissions: International Commission on Stratigraphy and the Commission on Management and Application of Geoscience Information. Three Commissions were closed as ratified by Council.

Another scientific focus was the International Geoscience Programme (IGCP) which is one of our cooperative ventures with UNESCO. This involved total restructuring and rebuilding of the Scientific Board.

Administratively, a lot of energy was given to the issue of Statutes and Bylaws for IGC and IUGS. Financially, the SG contacted most of the National Committees requesting an upgrade where appropriate. Several upgrades were received.

From the communication and public outreach perspective IUGS was strongly supportive of the IYPE for 2008.

For 2008 the SG will deal mainly with Oslo Congress.

#### **4. d. Treasurer's Report**

Antonio Brambati noted that it was a good year and mentioned that fees would increase. He also briefly discussed the declining US dollar versus the strong Euro. Brambati reported that the IUGS has two current accounts and a short term guaranteed deposit account in Trieste, Italy. The main income is from country members and the EC functions to serve the member countries. The bulk of the income goes to scientific endeavours (e.g., IYPE, IGCP and IUGS Commissions) and strategic uses; not to administration. Some 75% of the budget goes toward scientific endeavours (e.g., IYPE and Episodes) and 25% to administration (e.g., Annual Report and promotion). The President, Treasurer and Secretary General all have their travel expenses covered by their own respective countries; the expenses for the rest of the EC are covered by IUGS. Cash flow is a problem and money is clearly lost waiting for members to pay fees to the extent that the Union functions with a net deficit over much of the year.

In 2007, there were 118 IUGS adhering organizations (117 in 2005, 116 in 2004, 115 in 2003); Active members: 88 (83 in 2006, 77 in 2005, 79 in 2004, 72 in 2003); Inactive members: 30 (35 in 2006, 40 in 2005, 37 in 2004, 43 in 2003). In conclusion, over the last four years the total number of the Adhering Organizations increased from 115 to 118; Active membership increased from 72 to 88; and Inactive members decreased from 43 to 30. During 2007, five Inactive Adhering Organizations became Active: Botswana, Egypt, Malawi, Mexico and Tanzania. Croatia, Cyprus, Estonia, Czech Republic, Denmark and the UK asked to upgrade their category starting from 2008.

Brambati noted that often these do not reflect the real costs. Our annual contribution of US \$23,000 to Episodes for editing, lay-out, printing and distribution, is relatively small in comparison with the actual costs incurred by the Chinese Ministry of Land and Resources who host the Journal. The same holds true for the costs related to IUGS meetings which are covered, at least in part, by the countries hosting such meetings and for a very substantial part by the parent organizations of the Bureau members (President, Secretary-General and Treasurer and their supporting staff) which cover salary and all their travel costs. These forms of support save IUGS at least an estimated \$100,000 per year. A comparable amount is further saved by IUGS having been given the continuous generous contribution of the

Norwegian government to fully financially support the IUGS Permanent Secretariat in Trondheim. IUGS is extremely grateful to the Chinese, the Norwegian, the Canadian and the Italian governments for this generous support that enables the Union to invest significantly more in science development than would be otherwise possible.

#### 4. e. Permanent Secretariat's Report

Anne Liinamaa-Dehls noted that the Secretariat was present for the annual Executive Committee Meeting in Nara, two Bureau meetings (both in Paris) and at the Global Launch Event in UNESCO. In 2007 and early 2008 preparations for the IUGS-IGC Council Meeting 2008 began.

The following correspondence was sent out:

Date	Subject	Response
4/3/2007	President to Full Council "Resignation of Ed de Mulder"	None
7/25/2007	Nom. Ctte. to Full Council and Affiliated Organizations "Call Nominations for IUGS Executive Committee 2008-2012"	Nominations Processed by AB
10/26/2007	Secretariat to IUGS Commissions. "Request for 4 Year Reports from IUGS Commissions and names for new officers"; Terms of reference; and slate of Officers	Assembled, few to be followed up
12/25/2007	Secretary General to Council Members with Vote: Closing of Commission CSP, CFF and SECE	Ratified
3/4/2008	President to Full Council President "List of EC slate as proposed by the IUGS Nominating Committee"	None to date
3/2/2007	President to Full Council and Affiliated Organizations "Stream-lined Statutes for the Joint Council of IUGS-IGC" integrated and separated	EM and ZH to compile
3/7/2008	Secretary Generals of IUGS and 33rd Council to IUGS Members "Invitation to IUGS Council" (those eligible for vote, i.e. countries that have paid dues for 2007).	8-9 countries have registered

The IUGS Secretariat assisted in the preparation for the IYPE Global Launch Event, which was held 12-13 February. Preparation began in October by sending approximately 1200 individual invitations to the event by both e-mail and regular mail. By the second week of December an additional 900 invitations were sent out. Approximately 800 participants had registered on-line, by fax, phone and e-mail by early January. Each registrant received a personal letter of confirmation. Correspondence to the [IYPE.secretariat@ngu.no](mailto:IYPE.secretariat@ngu.no) account grew from an average of 5-6 e-mails a day in early October to 60-70 by mid January. For the most part the IYPE Secretariat received positive feedback for its role in this great event. The IYPE Secretariat matters which arrive at NGU are primarily dealt with by Åse Minde. She expertly handled the student contest entries – nearly 100 students made it to the event.

Via internet news sources, it is evident that the UN International Year of Planet Earth has brought more international attention to IUGS than all other promotional initiatives combined. However, the Secretariat has made efforts to increase circulation of the IUGS Bulletin, which now is circulated to many of the individuals on the IYPE contact listing. In early 2007, the IUGS Bulletin reached about 7000 addresses. Today approximately 9200 address are listed.



The Secretariat continues to assist in administrative matters related to International Geoscience Programme, including the “Call for Nominations to the IGCP Scientific Board” (May 2007), which resulted in 150 nominations. These were forwarded to the Secretary General in September. The Secretariat has nearly completed the assembly of Financial Statement and Meeting Report forms to fulfill a contract with IUGS 4500040361 (deadline for closure March 31, 2008).

In October 2007 the IUGS Secretariat forwarded to the Royal Society (UK) a list of our current inactive members in Africa and a listing of organizations that could be potential new members to be included in the “Royal Society Programme for the increased involvement of African countries in ICSU Scientific Unions”. On February 27, 2008 we were informed funds were potentially available to all 22 countries listed provided these countries apply directly to the Royal Society to request support, however, to date only Ivory Coast has made an application. Both the director of ICSU Africa and the Secretary General of GSA were informed of this situation.

The office is financed by the Norwegian Ministry of Trade and Industry and managed by the Geological Survey of Norway (NGU) in Trondheim. Liinamaa-Dehls thanked Ezzoura Errami for her careful attention in organizing facilities and accommodation for the participants of the 58<sup>th</sup> IUGS Executive Committee meeting.

#### **Action Item 1**

IUGS to contact the Royal Society thanking them for covering outstanding fees of those African countries with inactive membership; and also asking for further clarification on the duration of support.

#### **4. f. Applications for Affiliation**

In 2007 Council ratified the Executive Committees decision to accept four new Affiliated Organizations to IUGS: National Ground Water Association (NGWA); Association of African Women Geologists (AAWG). CCOP (inter-governmental MoU written in 2008) and Geological Society of India (national) have submitted applications, but Statutes and Bye-laws must be examined.

#### **Action Item 2**

Email GSI and CCOP before Oslo to let them know that they have been unanimously accepted as Affiliate Members of IUGS, pending examination of their Statutes and Byelaws.

## 5) ANNUAL REPORTS AND FUTURE PLANS OF IUGS BODIES

### 5. a. Adhering Organizations

#### 5. a. 1 Applications for Membership

Peter Bobrowsky, Antonio Brambati and Anne Liinamaa-Dehls addressed this item. Council has ratified membership for Latvia and Mozambique, which means they have now become full members of Council and entitled to vote in Council matters. There have been no new applications. However, IUGS has approached the following groups to consider IUGS membership under the “Royal Society Programme for increased involvement of African countries in ICSU Scientific Unions”. Mikhail Fedonkin wanted clarification on this commitment. Liinamaa-Dehls replied that the Royal Society will pay the 2008 fees, but not back fees, and if a plan is in place, continue funding for 3 years. Bobrowsky also noted it was approved by Bureau that Geological Surveys could be approached. Eldridge Moores remarked that under the current Statutes and Byelaws, new applicants can vote on IGC matters but not on IUGS matters.

Country	Organization
Benin	Office Beninois des Recherches Geologiques et Minières (OBRGM)
Central African Republic	Ministere des Mines, de l'energie et de l'Hydraulique
Congo	Central Africa Mineral Resources Development Centre (CAMRDC)
Ethiopia	Geological Survey of Ethiopia
Guinea	Direction Generale des Mines et Geologie
Mali	Direction Nationale de la Geologie et des Mines (DNGM)
Rwanda	Direction des Mines et de la Geologie (MINERENA)
Mauritania	Office Mauritanien de Recherches Géologiques (OMRG)
Comoros	Recherche de la Miniere
Djibouti	Institut Supérieur d'etudes et de Recherches Scientifiques et Technique (ISERST)
Equatorial Guinea	Department of Mines and Hydrocarbons
Lesotho	Department of Mines & Geology
Liberia	Liberian Geological Survey
Sierra Leone	Geological Survey and Mines Division
Togo	General Directorate of Mines and Geology (DGMG)

#### 5. a. 2 Reports of Adhering Organizations

Peter Bobrowsky announced that 23 reports from Adhering Organizations arrived before the EC Meeting in March 2008.

Country	Contact	Email address
Albania	Mr. Adil Neziraj, Director General	aneziraj@gsa.gov.al
Azerbaijan	Mr. Ismail-Zadeh Arif Jafar, Chair	gia@azdata.net
Canada	Dr. Bryan T. Schreiner, Chairman	bt.schreiner@usask.ca
Chile	Professor Francisco Herve, President	fherve@cec.uchile.cl
Cyprus	Dr. Polys Michealidis, Director	director@gsd.moa.gov.cy
Estonia	Dr. D. Kaljo, Chair	kaljo@gi.ee
Finland	Dr. Sinikka Roos, Secretary	sinikka.roos@gtk.fi
France	Dr. Alain Blicck, Secretary	Alain.Blicck@univ-lille1.fr
Germany	Prof. Hans J. Kümpel, Secretary	Kuempel@bgr.de
Italy	Prof. Gian Battista Vai, Chair	giambattista.vai@unibo.it

Japan	Dr. Yasuji Saito, Chairman	yssaito@jc4.so-net.ne.jp
Lithuania	Dr. Petras Sinkunas, Chair	Sinkunas@geo.lt
Morocco	Abdelaziz Charik	abcharik@yahoo.fr
Namibia	Dr. G.I.C. Schneider, Honorary Secretary	gschneider@mme.gov.na
Netherlands	Dr. Linda Groen	rak@bureau.knaw.nl
New Zealand	Scott Nodder , Secretary	s.nodder@niwa.co.nz
Norway	Dr. Anders Elverhøi, Chairman	anders.elverhoi@geologi.uio.no
Poland	Prof. Dr Andrzej Zelazniewicz, President	pansudet@pwr.wroc.pl
Russia	Dr. Saima M. Makhmutova, Acting Executive Secretary	ncgrus@ginras.ru
Serbia	Prof. Dr. Rundic Ljupko , President	rundic@rgf.bg.ac.yu
Slovakia	Prof. RNDr Dusan Plasienka, President	plasienska@fns.uniba.sk
Sweden	Prof. Olle Selinus	olle.Selinus@sgu.se
United Kingdom	Dr. Edmund Nickless, Executive Secretary	edmund.nickless@geolsoc.org.uk

## 5. b. Committees

### 5. b. 1 Nominating Committee

Antonio Brambati introduced the list of Candidates recommended by the IUGS Nominating Committee in Paris, 14<sup>th</sup> February, 2008. Factors taken into account when making selections included:

- 1) Geography and Disciplinary balance
- 2) Personal proficiency on global science
- 3) Experience in administration of scientific organizations
- 4) Infrastructure support
- 5) Gender balance
- 6) Willingness to carry out IUGS mission
- 7) Diplomatic skills
- 8) Integrity

Position	Recommended Candidate
President	Alberto Riccardi (Argentina)
Secretary-General	Peter Bobrowsky (Canada)
Treasurer	William Cavazza (Italy)
Vice-Presidents	Jacques Charvet (France) Ochir Gerel (Mongolia)
Councillors (2008-2012)	Colin Simpson (Australia) Ezzoura Errami (Morocco)
Councillors (2010-2014)	Wesley Hill (USA) Sampat Kumar Tandon (India)

Brambati thought it important to remain transparent when recommending nominations. The choices above reflect the majority view. He was against having more than one nominee for Bureau positions, and noted that the work done by the Committee was thorough and the suggested names were arrived at by consensus.

Peter Bobrowsky felt that alternate candidates should have been included where possible but noted the EC had to accept the outcome of the NC. Sylvi Haldorsen worried about what will happen if an alternative slate of legally nominated candidates is presented for Oslo. Eldridge Moores noted that over the years (since 1961), there had been a consistent Euro-centric bias; Marta Mantovani was shown statistics to this effect.

### **5. b. 2 Publication Committee**

Godfrey Nowlan reported that during the year 2007, the Publications Committee of IUGS was active and mainly performed the following tasks. The PC maintained tight relationship with the GSL, and the book-publication works were well fulfilled. Many proposals were sent to GSL by the IUGS-related bodies and IGCP, and the preliminary contacts with all conveners of the 33<sup>rd</sup> IGC were established. The group of PC participated in the Association of Earth Science Editors meeting in Calgary in September 2007, where they discussed the publications in the developing countries and assessed the publication situations in South America and Africa. They exchanged ideas and information with their counterparts.

A survey on the publication of IUGS-related material (e.g. Information on past publications and their venues, future publication plans of Episodes, and GSL) was conducted among all Commissions, Joint Programs, Task Groups and Initiatives. The results showed an interesting figure of the publication activities of these bodies. Most IUGS bodies (23/30) were cooperative in this survey. However, the situation of the joint program with IGCP was very disappointing. Only one out of over more than forty project leaders responded.

The publication of materials of IUGS-related bodies in Episodes, and with the Geological Society of London was reported. Based on the survey, some recommendations were made by the PC:

- More efficient communication with IUGS bodies.
- Notices of the publication of books under the GSL agreement should appear in the IUGS E-Bulletins.
- Notice of the GSL agreement should be prominently displayed on the IUGS web site.

With regards to the IGCP projects, IUGS should insist on the proper maintenance of websites as a condition of approving and funding an IGCP project. IUGS, jointly with GSL, should communicate with IGCP project leaders annually to remind them of the agreement and encourage them to publish proceedings in the GSL series. Eldridge Moores questioned who owned the copyright on IUGS publications and recommended seeking legal counsel regarding the issue.

Zhenyu Yang followed with a report on the situation with Episodes. In 2007, 4 issues (320 pages) were published. IYPE was well advertized and publicized, including a new section on IYPE. A speech by the Chinese Premier was also published. All back issues to 1978 are now on-line. The work plan for 2008 is in review and will include a Special Issue for the IGC comprising 26 papers.

On a recent visit, Eldridge Moores found the staff enthusiastic and competent. Some 50% of submissions are rejected because the Editors are concerned about quality. Mikhail Fedonkin said that Episodes was a greatly appreciated journal in Russia. Peter Bobrowsky congratulated the team, noting the attention to quality is increasing Episode's Impact Factor (now >2). He also brought to Yang's

attention an out-dated link to Yahoo. Zhang Hongren mentioned collaboration between Episodes and Nature (Geoscience Branch); articles not published in Nature will be published in Episodes.

Godfrey Nowlan pointed out that the MoU with China expires summer 2008 and questioned whether he should be looking for new publishing headquarters. GSL was not interested, but AGU may take it on as an outreach initiative. Moores expressed concern too; stressing the journal should remain not-for-profit. Hongren thought that with a new Government in place, more definite answers could be expected in a couple of months. Out-sourcing to India was considered a possibility. Bobrowsky suggested advertising in the E-Bulletins and placing a notice on the Episodes website, with enquiries to be directed to the PC. Sylvi Haldorsen suggested alerting the National Adhering Bodies.

Nowlan thought that publishing relationships with ICS will improve with the change in Board structure and mentioned ICSU's new ethical guidelines for publications (to be completed in the next four years). He saw the need for a better relationship with the Global Education community. There was also scope for improved communication between IUGS and IGCP bodies, including the re-vamping of websites to link with IUGS. Peter Bobrowsky suggested IGCP projects publishing in Episodes and with the GSL will be rewarded. Antonio Brambati noted that in the last Paris Bureau meeting, Zhang Hongren suggested general thematic books with IYPE (e.g., tsunamis and other IYPE themes), and wondered whether GSL would publish these. Nowlan pointed out that GSL was a science publisher, but promised, after further review to bring this to the new EC after Oslo.

Peter Bobrowsky moved discussion to the IUGS Website. Since the departure of John Aaron, a number of changes have taken place. Modern software allows for regular updates, sometimes weekly. For example, the new letter from the President will be posted there. It was too much work to maintain GEM and TGGGB databases; rather the website should serve as a portal, providing links. Other GeoUnions could be promoted up-front with their links. Zhang Hongren also wanted to see a search engine. Sylvi Haldorsen and Godfrey Nowlan saw the need to improve the visibility of IUGS Affiliates and wanted to see better links with them (perhaps a small database). Haldorsen was also Webmaster at INQUA, and suggested links to GeoParks on the IUGS website. Bobrowsky recommended that changes to the website be handled as part of duties of the Publications Committee. An invitation for a new Webmaster and host for the Website was needed. Zhang Hongren pointed out that this required a MoU with an Institution.

Bobrowsky congratulated Godfrey Nowlan's hard work as Chair, and asked if he was interested in continuing after this term; Nowlan said he agrees.

#### **Action Item 11**

Publications Committee to: 1) update, revise and coordinate changes to the IUGS Website (e.g., posting a letter on IUGS policies); 2) prepare an EoI to host Episodes and/or the Website; and 3) update the Publications List on the Website.

#### **Motion**

Peter Bobrowsky motioned the EC to accept PC Report and for Godfrey Nowlan to continue as Chair of the Publications Committee.

Motion: **unanimously accepted**

### **5. b. 3 Ad hoc Review Committees (see also 5.d.2)**

Ryo Matsumoto ran through the objectives of the IUGS Task Group Global Geochemical Baselines (TGGGB) where Matsumoto, Mikhail Fedonkin, James Hein met at the Federal Centre in Denver, Colorado, on December 2007. David Smith, Leader of the TGGGB (US Geological Survey), and Shaun Reeder, Science Secretary (British Geological Survey), presented on its organization, past and current performance, problems, and future work plan. The main objectives of the group are to prepare a global geochemical database, and its representation in map form, and to document the concentration and distribution of chemical elements and species in the Earth's near-surface environment. The database and accompanying maps can then be used to create a geochemical baseline against which future human-induced or natural changes to the chemistry of the land surface may be recognized and measured.

The Task Group has been very active since 1998, with a number of excellent publications of the Geochemical Atlas of Europe, North America, India, and part of Brazil. The establishment of the baseline is well understood to be important for the assessment of global changes. TGGGB collects and integrate a large number of variable data sets to establish the nation-wide to continental scale geochemical baselines. Considering the importance to establish global baselines and to directly contribute to human societies, an overarching structure such as IUGS-TG should be critical for the efficiency of the project and the integration of the global data.

Sylvi Haldorsen noted that Africa was under-represented and wondered whether TGGGB did what IUGS asked. Matsumoto replied that it did, e.g., workshops designed to pass on expertise and methodologies. Godfrey Nowlan wondered if the Group has explored linkages with other agencies to cover Africa.

Total cost of the overall activities is more than \$1.4 million per year. Financial support from the IUGS is very limited compared with the estimated expenditures, but IUGS is able to provide opportunities to organize an international-intercontinental consortium to precede the global geochemical mapping project. Some financial support from the IUGS should help the Group conduct promotion and educational activities and to establish the global standardization of sampling and analysis. Jean-Paul Cadet complimented the Group for making a little money go a long way

The revised report of TGGGB will be published in Episodes. Bobrowsky saw the need for a concrete recommendation for publication and thanked Matsumoto and Fedonkin for their work. Jean-Paul Cadet and Alberto Riccardi suggested a guideline document for report writing.

#### **Action Item 8**

Ad hoc review committees to receive a guidelines document outlining how to compile a report, what to include and what not to do.

#### **Action Item 9**

Mikhail Fedonkin and Ryo Matsumoto to prepare a letter for Zhang Hongren to be sent to TGGGB asking for them to better define their role and explaining why their request for US\$30,000 was not accepted as well as rationalizing the actual amount awarded.

#### **Motion**

After some discussion, a motion was forwarded to accept the tabled report following amendments from the EC.

Motion: **unanimously accepted**

#### **5. b. 4 IGC Committee**

Zhang Hongren commented that the activities of the IGCC were closely related to the Statutes Committee. He pointed out that there has been a long process of merging the Statutes and Byelaws, involving two points of view: this problem needs to be resolved. Peter Bobrowsky raised the question of funding IGCC while at meeting and the Host Country covering expenses (this was not in the Statutes). Ian Lambert said that Australia could cover IGCC expenses in preparation for IGC 34, provided a single meeting could be arranged. Hongren recognized that there was a tradition of Hosting Nations covering the expenses. Eldridge Moores noted that in the new Statutes, only the Past President and Past Secretary General of IGC can be covered. There was general agreement that Developing Countries requesting to host the 2016 IGC may not be able to cover IGCC expenses, so IUGS should consider some funding.

#### **5. b. 5 Statutes Committee** [see Policy and Strategy](#)

See discussion under **9) Policy and Strategy Matters**

#### **5. c. Commissions**

Peter Bobrowsky reminded the EC that many of the commission officers will be changing positions or retiring in Oslo.

#### **5. c. 1. Geoscience in Environmental Management (GEM)**

Sylvi Haldorsen reported that GEM comprises 16 officers from 14 countries, with a full participation by a number of developing countries. It is truly international. GEM has four working groups (all of them seem to be quite active): Urban Geology; Geology and Ecosystems; International Borders-Geoenvironmental Concerns; and Communicating Environmental Geoscience. The first 3 have now fulfilled their objectives and are preparing for closure. Chief products in 2007: GEM held 12 technical meetings in 2007 in Australia, Brazil, Chile, Finland, Japan, Lithuania, Malaysia, Poland and Thailand, 7 of these were held to celebrate the International Year of the Planet Earth. GEMs News is now published electronically and distributed to over 200 recipients in more than 82 countries.

Plans for 2008 include: completing an Information Package on Urban Geoscience; 2 new books in press “Communicating Environmental Geoscience” and “Geoscience Governance,” will be distributed at the IGC; a focus on highlighting IYPE; and GEMs leaders will collaborate with others to convene 12 technical sessions at the IGC. Changes to be proposed at the IGC in Oslo include: a change of leadership at the Congress and proposals for new working groups:

- Groundwater and Environment
- Dust and Particles

- Geopollution and Man-made strata
- Coastal Processes and Management
- Adaption to Climate Change
- Forensic Geology
- Mercury and mining
- Geoscience Governance for Environmental Security
- Role of Geoscience in Poverty Alleviation

Haldorsen noted that in 2007, the total budget was US\$ 85,000; with monies supplied from IUGS (\$7,500), Membership fees (\$1,000), Funds from Working Group Project (\$1,000) and Funds from other sources (\$75,000). GEM asks for a financial support from IUGS of \$10,000 for 2008 to implement the activities of IYPE and other events. She concluded that GEM was a very active commission, with many active leaders. It has a wide participation from all parts of the world. Its activity fits very well with the main objectives of the International Year of the Planet Earth. It deserves a high level of funding, at least at the same level as last year.

### **5. c. 2 History of Geological Sciences (INHIGEO)**

Antonio Brambati reported that the International Commission on the History of Geological Sciences (INHIGEO) had another good year in 2007, as evidenced by publication productivity and hosting a highly successful meeting and associated field excursions in Eichstätt (Bavaria - Germania). This meeting was their largest event, involving some sixty professional presentations. A wide range of issues were covered, see Newsletter No. 40, including: the status of INHIGEO publications; locations and themes for future meetings; and the 2008 meeting in Oslo. It should be noted that financial support from IUGS and IUHPS/DHST was instrumental in the success of the Eichstätt events.

Publication productivity was high in 2007: the content-rich and strikingly illustrated book “FOUR CENTURIES OF GEOLOGICAL TRAVEL: *The Search for Knowledge on Foot, Bicycle, Sledge and Camel*” was published as Special Publication 287 of the Geological Society of London. Another book entitled “CONTRIBUTIONS TO THE HISTORY OF GEOMORPHOLOGY AND QUATERNARY GEOLOGY” will be published in 2008 as well as the expanded papers stemming from the 32<sup>nd</sup> Symposium (July 2007; Eichstätt, Germany). The theme is “Geology and Religion”. INHIGEO members also continue to contribute to Episodes. During 2007 INHIGEO was able to update its website, which is part of the IUGS system. Through the website are available the Annual Reports and items of interests concerning its calendar of upcoming events.

The Commission is in a pleasant position regarding forthcoming meetings, through to the 34th International Geological Congress (IGC), to be held in Brisbane, Australia, in 2012. Future meetings will be held in Norway (2008), Canada (2009), Spain (2010), Japan (2011), and Australia (2012). The expenditure for 2007 was similar to that for 2006, but the income was substantially higher, thanks to the generosity and stronger financial situations of IUGS and IUHPS/DHST. Therefore, for 2008 they are presenting a suitably moderated request. Rather than the \$6,500 requested in 2006, they are suggesting IUGS support of \$4,500 for 2007 (to cover operating costs, IGC-33 in Oslo, Newsletter production, etc.).

Peter Bobrowsky suggested IUGS use INHIGEO as an example of a good commission. Jean-Paul Cadet suggested the IUGS Bureau meet with members at the IGC; Eldridge Moores agreed IUGS should meet with the Chair.



### **Action Item 12**

A letter thanking INHIGEO for their good work over the years will be written by Antonio Brambati.

### **Action Item 13**

The Permanent Secretariat to compile and circulate a list of contact information on Officers of Task Groups, Commissions, Adhering Organizations and Affiliates so that the IUGS Bureau and EC Members can contact these when visiting countries.

### **5. c. 3 International Commission on Stratigraphy (ICS)**

Mikhail Fedonkin discussed the consolidated report of the International Commission on Stratigraphy (ICS) for year 2007 (which ran to 199 pages). The report covered major accomplishments of ICS and included an attached series of reports from every division of the Sub-commission.

The major accomplishments related to the International Divisions of Geologic Time are the Hadean in the Precambrian; newly ratified international stages in Cambrian; a full set of inter-regional stages for Ordovician; the INQUA-ICS agreement to establish the Quaternary as an internationally recognized Period/System; and the first inter-planetary correlation charts for the histories of Earth, Moon, Mars, Mercury and Venus. ICS has accomplished much for the promotion of education in stratigraphy and in the Earth history (website, printed materials, computer programs such as *TimeScale Creator* in progress etc.), some in conjunction with the IYPE.

Plans for 2008 and associated budget, along with a long-term overview of the ICS achievements and future goals were also reported. A “Concise Geological Time Scale” will be published in 2008; this is a numerical geological time scale based on synthesis of the data from astronomical tuning, radiometric dating and quantitative stratigraphy. Under discussion is the “International Association of Stratigraphic Geologists” that prepares its founding meeting in 2009 in Italy, an organization that may play a complementary role to ICS activity in education and public outreach.

Fedonkin felt the report exposed existing difficulties, partly related to the budget reduction. Total budget request for 2008 is \$50,000. For 2008, a request of \$36,000, plus a special subsidy of \$14,000 (i.e., the pre-2005 funding level from IUGS) would support incoming and continuing ICS officers who are on pension or are from less-funded nations. This would provide half-price registration and a subsidy for travel and lodging (but not food) during the 33<sup>rd</sup> IGC in Oslo.

Eldridge Moores complimented Mikhail Fedonkin and Alberto Riccardi for their work in the face of many problems with the past ICS executive. Some ICS members have plans to establish a competing Stratigraphic Commission, cautioned Moores. In fairness, Fedonkin remarked that there were national groups that resented the dictates of the ICS; and Moores expressed discomfort with legislative standardization.

Alberto Riccardi agreed with Fedonkin and Moores. In its beginning, the global community wanted the ICS. By the 1960s there was fragmentation, with a core commission establishing standardization. Now some members want to remove sub-commissions and national bodies do not care what comes from ICS. National bodies responding politically rather than taking what scientists think as important. Complying with principles and rules are essential and this is an important stewardship role for IUGS.

Jean-Paul Cadet wanted a discrepancy in the stratigraphic charts resolved before Oslo, and the Quaternary situation to be clarified in all books and charts.

Mikhail Fedonkin asked for three GSSPs to be ratified; all have been previously ratified by ICS sub-commissions.

### **1) Guzhangian (Cambrian) GSSP -- October 16 2007**

The Global boundary Stratotype Section and Point (GSSP) for the base of Guzhangian Stage (formerly “Stage 7”) of the Cambrian System is defined at a point 121.3 m above the base of the Huaqiao Formation in the Louyixi section (28° 43.20’ N; 109° 57.88’ E) along the Youshui River (Fengtan Reservoir), about 4 km NW of Louyixi, Guzhang County, NW Hunan Province, South China. This level coincides with the lowest occurrence of the cosmopolitan agnostoid trilobite *Lejopyge laevigata*, which is one of the most recognizable levels in the Cambrian. This level is bracketed by several secondary markers of lowest/highest occurrences of widespread conodonts and of agnostoid and polymerid trilobites.

**GSSP: Unanimously approved**

### **2) Dapingian (Ordovician) GSSP – October 16 2007**

The third global stage (lower stage of the Middle Ordovician Series) of the Ordovician System shall be named “*Dapingian*”. The name is derived from the Daping village near the ratified GSSP in southern China.

**GSSP: Unanimously approved**

### **3) Visean (Carboniferous) -- March 1 2008**

The Global boundary Stratotype Section and Point (GSSP) for the base of the VISEAN STAGE of MIDDLE MISSISSIPPIAN SERIES (lower Carboniferous) is defined as the base of bed 83 in the Pengchong section along the bed of a small stream south of the village of Pengchong (24° 26’N, 109° 27’E), 15 km N-NE of the city of Liuzhou and about 130 km SW of Guilin in the Guangxi Autonomous Region (South China). This point coincides with the first appearance of the benthic foraminifer, *Eoparastaffella simplex*, in the lineage of “*E. ovalis* group” to *E. simplex*. Secondary markers are the lowest occurrence of the conodont, *Gnathodus homopunctatus*, at less than 5 m above, and the highest occurrence of the conodont *Scaliognathus anchoralis europensis*, at about 30 m below the GSSP level.

**GSSP: Unanimously approved**

## **5. c. 4 Education, Training, and Technology Transfer (COGE)**

Gabi Schneider submitted her report prior to the meeting; it notes that COGE supported three major efforts as part of IYPE, namely the first International Earth Science Olympiad (IESO) organized by Korea and held in Seoul in October 2007. The Commission will seek a letter of congratulations from IUGS for the establishment of this wonderful event. The next IESO is being organized in the Philippines. COGE sponsored the Earth Science Education Unit (ESEU) of the United Kingdom to assist in the continuation of the Earth Learning Idea website. The Commission will continue to support this program each year during IYPE. The first lengthy “GeoTime Trail” was opened in Waterloo, Ontario in October of 2007 as part of the IYPE celebrations. This 4.56 km long walking trail is posted

with signs illustrating key events in Earth history. Others are planned elsewhere in Canada as part of IYPE.

The Commission worked with the International Geoscience Education Organisation (IGEO) to undertake a survey of the status of Earth science education in schools internationally. The survey is now complete. In partnership with IGEO, The Commission has proposed a symposium for the Oslo IGC. It has been accepted and they are awaiting papers. The Commission continued with the development and management of the COGE website by Greg McNamara (Australia).

The Commission is seeking \$5000 from IUGS to operate its programs during 2008. These funds will be used to maintain and continue development of the website (US\$ 2000); for Earth Learning Idea program funding (\$2000); and, conference phone calls, postage and materials (\$1000). Eldridge Moores thanked Gabi Schneider for submitting the report.

### **5. c. 5 Management and Application of Geoscience Information (CGI)**

Zhang Hongren reported that substantial progress has been made by CGI in 2007. CGI's Interoperability Working Group has continued to be extremely active in 2007 and the highlight of the year has been the development of GeoSciML version 2, which improves the earlier version by adding further refinements to geological units and geological structures, fossils, and controlled vocabularies. The new version also harmonizes borehole encoding with newly published standards for observations and sampling. The third GeoSciML interoperability test-bed is underway, and will be formally demonstrated at the 33rd IGC in Oslo.

CGI was successful in fund raising and has important financial support from the German Federal Ministry for Economic Cooperation and Development who officially awarded 125,000 Euro in November 2007, through German Geological Survey (BGR), for CGI to conduct the outreach workshop in Africa. Besides this, some US\$20,000 has been raised from within the CGI. In the next few months BGR, CGI and the local organizing committee in the Namibian Geological Survey will work together to organize this outreach workshop which aims at promoting geoscience information works in Africa.

CGI and members of its Council have been very closely involved in the development of OneGeology – the global initiative to make digital geological map data for the Earth more accessible. Following a very successful workshop in the UK in early 2007, the geological surveys and organizations from 72 countries are now participating. The full OneGeology portal will be launched at the 33<sup>rd</sup> IGC in August. A proposal for a major Geoscience Information Topical Symposium was successfully submitted by CGI to the 33<sup>rd</sup> IGC Organizing Committee.

During 2007 CGI officers and members were actively involved in and made their contributions to many important projects, workshops and meetings, etc., throughout the world. The CGI website, which received over 47,468 visitor sessions in 2007, plays a prominent part in CGI's communication. In 2008, CGI will hold elections for a new Council for the period 2008 – 2012.

In financial aspects, CGI ask IUGS for two sums of money in 2008: \$5,000 to run the basic CGI operation and the special meetings associated with the election of the new CGI Council; and \$5,000 to support its work on GeoSciML which will include costs associated with documenting the model and standard, and preparing information for its dissemination and acceptance.

Peter Bobrowsky said it was a pleasure working with them; they were a “bottom-up” organization.

### **5. c. 6 Closing of CSP, SECE and CFF**

Peter Bobrowsky discussed the closing of these Commissions, noting that with 41 countries casting ballots, quorum was achieved. The Council ratified the IUGS Executive Committee's decision to close the Commission of Fossil Fuels (CFF) (Agree=39; Disagree=1; Abstain=1). The Council ratified the IUGS Executive Committee's decision to close the Commission on the Systematic of Petrology (CSP) (Agree=37; Disagree= 4; with no abstentions). The Council also ratified the IUGS Executive Committee's decision to close the Commission on Solid Earth Composition and Evolution (SECE) (Agreed=36; Disagreed =3; Abstain=2). None of the three are on the table at Oslo.

### **5. c. 7 Proposals for New IUGS Commissions**

Peter Bobrowsky wanted to see more Commissions, and the following were reviewed by the EC:

- 1) Commission on Biogeotechnology submitted by Abdolazim Haghypour [abdolazim@haghipour.com](mailto:abdolazim@haghipour.com)
- 2) Commission on Geoscience in Food, Water and Environmental Security submitted by U. Aswathanarayana [uaswathanarayana@yahoo.com](mailto:uaswathanarayana@yahoo.com)).
- 3) Commission on Dust and Loess submitted by Jan-Berend Stuut [jbstuut@marum.de](mailto:jbstuut@marum.de)
- 4) Commission on Geohazards: nothing received.

Eldridge Moores noted that the IUGS recently closed the CFF despite the fact that fossil fuels are a critical global issue. He recommended that a new Commission on Sustainable Development be established to meet our own needs without compromising the ability of future generations to function.

Unfortunately, many applicants were not following instructions and it is difficult to enforce a top-down approach realized Bobrowsky. There is still the need for another call for proposals by the new EC, and Oslo is a good venue to make the request again in a more formal meeting.

Antonio Brambati saw the focus on Water as important because it conforms to UNESCO policy; he suggested collaboration with other GeoUnions. Sylvi Haldorsen saw overlap with IAH and mentions a request from an INQUA Group looking at water issues through geologic time.

## **5. d. Task Groups and Initiatives**

### **5. d. 1 Isotopes and Geochronology (TGIG)**

Mikhail Fedonkin reported that IUGS and IUPAC, The International Union of Pure and Applied Chemistry, set up a task group in October 2006 with the goal of updating the recommendations on radioactive decay constants (and half-lives) for geochronological use, last formalized in 1976. No information on the progress in this respect has yet been reported.

The annual report 2007 of the IUPAC-IUGS Task Group on Isotope Data in Geosciences contains recommendations concerning the Convention on the use of SI (*Le Système International d'unités*) units in Earth Sciences. The incorrect habit of expressing time differences in k.y., M.y., or G.y. is recommended to be replaced by ka, Ma, and Ga for thousand, million and billion years respectively in accordance with the SI standard. The half-lives should be expressed in ka, Ma, or Ga, and rates and decay constants in (ka)<sup>-1</sup>, (Ma)<sup>-1</sup> or (Ga)<sup>-1</sup>. Five partial meetings of the TGIG officers (2-3 colleagues) have taken place in 2007 in Italy, China and USA.

At the end of 2006, the TGIG was granted joint funding by IUGS and IUPAC (\$4900). For the year 2007, the funding from the IUGS was not required, because no travels were planned for 2007. For the year 2008, the TGIG will organize a plenary meeting and requests the budgeting of the whole unused amount (\$4900).

Alberto Riccardi added that he had reviewed this committee some six years ago and filled in some background history for the Observers. He was looking forward to what they will present at IGC33.

#### **5. d. 2 Global Geochemical Baselines (TGGGB)**

Sylvi Haldorsen addressed the 2007 annual report. The main objectives of the Working Group on Global Geochemical Baselines are to: 1) prepare a global geochemical database in order to give baseline data as a background to understand the natural quality of soils and to identify long-term human pollution; 2) produce maps based on these data; and 3) document the concentration and distribution of chemical elements and species in the Earth's near surface. These objectives fit well with the policy of IUGS as well as that of IYPE. The work is a truly international collaboration, with clear goals within an important research area.

The working group is led by a steering committee consisting of 10 persons, all of them from Europe or North America. TGGGB has been active over a number of years, producing publications, geochemical maps and running activities in Canada, North America, Europe and Asia. The working group has an excellent interface with other relevant international projects. However, except for IAEA, all these are European bodies. A pilot study was completed in Australia that will bring Australia more into the work.

Activities in 2007 included: *India* - Sampling of top and bottom soils has been completed in all states during 2007; *North America* - The pilot phase in Canada, US and Mexico has been completed and the results will be published in a special Volume of Applied Geochemistry (also mentioned in the IAGC report), for the full project 13,215 field sites have been identified, data is available from <http://tin.er.usgs.gov/geochem/doc/home.htm>; *Europe* - The two geochemical atlases completed in 2007 have been used in many countries, EuroGeoSurveys Geochemistry Expert Group held its first business meeting in Brussels in September, and plans were made for a study on agricultural soils in Europe; the geochemical atlases can now be loaded down from Internet; and the *Internet page* - One current priority is to organise a section in the IUGS Website, this is still under construction

Plans for 2008 include: *India* - Interpretation of the data based on the distribution maps for soil will be completed by March 2008; *North America* - The special volume of Applied Geochemistry will be published in late 2008 or beginning of 2009, all data from the chemical analysis of soils will be available by 2009; *Europe* - The sampling within the project on agricultural soils will start in 2008, in addition to the printed atlases, a CD version has been compiled; *IYPE* - Educational material in support

of the IYPE is being prepared and shall be uploaded on the IUGS website. In addition to the atlases, the task group report about a large number of reports and presentations at meetings.

IUGS provides nominal seed money, while the most important contribution is European National Geological Surveys, which have provided staff time and support to complete the work with the Atlas.

In summary, Haldorsen found this Working Group to be very active, and has produced good and important results. It also seems to be well organised, and it has a good collaboration with important governmental and international agencies. The \$1500 from IUGS is kept for promotional activities.

### **5. d. 3 Tectonics and Structural Geology (TecTask)**

Marta Mantovani remarked that this was the third year of activity of this Task Group. The website that was operational in 2007, but has been further improved, and now, more than 550 members are registered from 55 different countries, 20% of whom are from developing countries. The additional effort providing the means to host several links and pages related to group activities is also appreciated.

TecTask provided six scholarships for students of developing countries (mainly from West Africa), to assist them in attending a 15-day field training course in Burkina. Two additional scholarships allowed the participation of graduate students from developing countries in the Meeting of Young Researchers (Spain). The group promoted five brief presentations of TecTask during geological meetings and started collaboration with other organizations. In addition, TecTask is sponsoring two Symposia at the forthcoming IGC33. Its efforts in broadening the ambition and spectra of different actions scheduled for 2008 are in agreement with the policy of IUGS.

For 2008, the group requested 5000 Euro in support from IUGS.

Jean-Paul Cadet thought it was crucial to have a task group working on this, but worried about the future. Peter Bobrowsky suggested the Group apply to become a Commission. There was unanimous agreement that Bobrowsky write a letter to see if TecTask wanted to change their status. Ryo Matsumoto wanted TecTask (and TGGGB) to define their roles.

### **Action Item 14**

Secretary General will write TecTask and TGGGB asking whether they wish to change their status from Task Group to Commission.

### **5. d. 4 GeoHeritage**

Antonio Brambati commented that in September 2007 he was invited to present a keynote speech on "IUGS, IYPE and Society: aims and actions for a sustainable development" at the Annual ProGEO meeting in Ljubljana, Slovenia. The meeting was very fruitful and the possibility to propose a new Geopark in the shared region between Italy and Slovenia was discussed. Peter Bobrowsky, as the IUGS Secretary General on behalf of the IUGS, sent two letters to the directors of the Geological Departments of Trieste and Ljubljana to endorse this proposal.

Peter Bobrowsky noted that there was little contact with the GeoParks office. Zhang Hongren offered to check on activities and report back. However, IUGS has no official position so it is time to establish an IUGS role in GeoParks. Bobrowsky also highlighted the contributions of IUGS to IUCN reviews.

Jean-Paul Cadet reminded the EC that when GeoParks first started, IUGS was not interested. Now it is recognized as a new field of broad interest, bringing geology to wide range of groups. Antonio Brambati felt GeoHeritage was important to IUGS because of the implications for science, education and income; he also recommended IUGS should coordinate a presence in these areas.

Bobrowsky raised a final outstanding issue: Springer will publish a new journal in 2008 on GeoHeritage and IUGS will be part of the Editorial Board.

### **5. e. Affiliated Organizations**

Sylvi Haldorsen thanked the EC Rapporteurs for their work on the Affiliated Organizations Annual Reports. Peter Bobrowsky and Anne Liinamaa-Dehls suggested Annual Reports should be acknowledged personally with a letter to show that they have been read.

#### **Action Item 15**

EC Rapporteurs to write and thank Affiliate Organizations and cc the Secretary General and Secretariat; letters will be personalized to confirm that their reports have in fact been read.

#### **American Association of Petroleum Geologists (AAPG)**

AAPG aims to foster scientific research, to advance the science of geology, to promote technology, and to inspire high professional conduct, aims that still guide the Association today. It is currently one of the world's largest professional geological societies with a membership of over 32,000 of which over 4,000 are students; and over 30% of the membership works in the international arena. AAPG, together with sister organizations, is setting up branch offices around the world to better serve these members. The number of members in 2007 has risen in comparison with 2006, although the percentage increase is not quantified. Meetings included the highest attendances at the Annual Meeting (Houston) in the last 20 years and the International Convention (Perth). AAPG provides publications, conferences, and educational opportunities to geoscientists and disseminates the most current geological information available to the general public. AAPG's GIS Upstream Digital Reference Information Library (GIS-UDRIL) is now one of AAPG's most sought after products. AAPG is also a major player in the Geoscience World; and the publications aggregate now investigating the feasibility of publishing all key geoscience journals electronically. AAPG supports a code of ethics for professional geologists to assure employers and clients of the integrity of its members. Officers guide the Association and a House of Delegates is elected annually. The organization's programs are administered by an Executive Director and staff which are located in Tulsa, Oklahoma. The AAPG is a founding member of IYPE. Visit the Website at: <http://www.aapg.org>

#### **American Geological Institute (AGI)**

The American Geological Institute is a non-profit federation of 44 geoscientific and professional associations representing over 100,000 members. It aims to voice the shared interests of the geological profession. In addition, it plays a major role in strengthening geoscience education and societal awareness. AGI's geoscience database GeoRef has reached 2.9 million references to become the world's largest and most comprehensive on geoscience. AGI also participates in GeoScience World (GSW), an integrated system of dozens of journals and GeoRef. The fifth edition of the Glossary of Geology (40,000 terms) is available online, including Spanish equivalents for many terms. AGI



participates as a member of the IUGS CGI Working Group for the Multilingual Thesaurus of Geosciences. AGI also organized the ninth annual Earth Science Week, together with the USGS, NASA, NOAA, IRIS, the AAPG Foundation, and the National Park Service.

This past year saw appointment of its new director, P. Patrick Leahy. The organization is financially sound. It is heavily involved in the support of teaching of earth science at the primary and secondary school level, and of popularization of earth science through television and films. It annually sponsors Earth Science Week. AGI is a Founding Partner of the International Year of Planet Earth. Its' activities include ones in Environmental Affairs, Governmental Affairs, where it serves as an advocate for geology in US governmental circles. AGI publishes *Geotimes* and its database *Georef* continues to grow, with 120,000 references added in 2007 for a total of 2.9 million.

### **American Geophysical Union (AGU)**

AGU helps to promote the development of Earth science worldwide and seeks to assure that the increasing understanding of the Earth is taken into account in formulating public policy. It is an active Union with over 30,000 members ranging from geologists to astrophysicists. AGU is self-supporting although some grants, primarily from U.S. government agencies, to support special limited-term projects are also obtained. AGU is formally related with ICSU activities through the START Secretariat, an ICSU/IGBP activity that operates under AGU's umbrella in Washington, DC. AGU also interacts with IUGG. All AGU journals are now fully electronic and their publication is faster than at any time in the past 15 years even as more pages are being published. A portion of a new AGU publication, *Space Weather*, is available on the web free at <http://www.agu.org>.

### **Arab Geologists Association (AGA)**

AGA has a significant role in the organization of geology in Arabian countries, which helps in promoting IUGS visibility in this area. Unfortunately, there are currently major political complications surrounding this group and communication and output is not evident.

### **Association of Applied Geochemists (AAG)**

The Association of Applied Geochemists (formerly the Association of Exploration Geochemists - AEG) specializes in advancing the science of exploration and environmental geochemistry and furthering the interests of both geochemists and geochemistry by encouraging research and development and the distribution of scientific information. The new name better reflects its scope and its membership. It had an active membership of about 600 during 2007. The Association has a twelve-member Board of Councilors and Regional Councilors outside North America representing the British Isles, Europe, southern Africa, Brazil, Chile, Southern Asia, and China.

In 2007, AAG hosted its biennial symposium (the 23<sup>rd</sup> International Applied Geochemistry Symposium) in Oviedo, Asturias, Spain. The Association's Gold Medal, given for outstanding contribution to the science of applied geochemistry, was awarded at the symposium to Prof. Xuejing Xie of the Institute of Geophysical and Geochemical Exploration in Langfang, Hebei, China. The AAG-sponsored annual Distinguished Lecturer Series was presented by Dr. Kurt Kyser, Director of the Queen's Facility for Isotope Research at Queen's University in Kingston, Ontario, Canada.

The Association sponsors the publication of the journal *Geochemistry: Exploration, Environment, Analysis* in partnership with the Geological Society of London, and publishes a quarterly newsletter, *EXPLORE*, which is distributed throughout the



world and contains timely articles on a variety of applied geochemistry topics. Visit the Website at: <http://www.appliedgeochemists.org/>

### **Association of African Women Geoscientists (AAWG)**

This is a new member of the Union. The 3<sup>rd</sup> Conference of AAWG in 2006 was instrumental in bringing together over 150 Earth Scientists from many different continents. The result of that meeting was the publication as Special Issue of the Journal of African Earth Sciences in 2007. This was a landmark event and its publication is in agreement within IUGS objectives. The Union very much welcomes the addition of this group to our Affiliates.

### **Association of European Geological Societies (AEGS)**

The Association currently has 30 members from 29 countries. Membership to AEGS is open to all non-governmental societies, institutions and organizations in Europe active on a country wide scale in geology or earth sciences. Since 1975, AEGS has helped in the organization of the biannual meetings: MAEGS (Meeting of the Association of European Geological Societies). In this way the association serves as a “clamp” for European geological sciences, especially on the level of the national geological societies. In 2007, a meeting entitled “Georesources and public policy” took place in Tallinn, Estonia and included 80 participants from 17 countries. The AEGS awarded its first Percival Allen Medal to Dr. Jens Dieter Becker-Platen (former Vice President of the German Geological Survey).

### **Association of Geoscientists for International Development (AGID)**

The Association encourages communication between individuals, societies, agencies and corporations with interest in the application of geosciences to sustainable development and further encourages and promotes activities in geoscientific fields that are related to the needs of developing countries. The headquarters are in Bangladesh. In recent years, there has been a fall in membership in the ‘developed’ world; however, the activities of AGID in the Indian sub-continent demonstrate that a decentralised AGID can continue to function successfully as a regional network. The volunteer services of AGID officers keep the expenditures of the organization low. UNESCO provides modest support to a regularly published regional geoscience Newsletter. AGID continued to distribute its’ journal Geoscience and Development in 2007. Copies of the S and W Asia edition of the Geoscience Newsletter were distributed worldwide. Plans are to make these publications available on-line at ([http://www.bgs.ac.uk/agid/AGID\\_Index.html](http://www.bgs.ac.uk/agid/AGID_Index.html)), hosted by the British Geological Survey. AGID interfaces with several international projects bringing to them their experience with developing countries; for example, IYPE, the Geological Society of London, IAH and IGCP.

Earth Learning Idea was a new initiative in 2007 that aims to introduce a new idea for learning about the earth every week during the Year of Planet Earth (2008). AGID’s contribution to the outreach aims of IYPE is a project entitled “Geoscience Information for Schools in Developing Countries: The Earth And Me” (TEAM)”. The GROWNET Project (IGCP-530) is concerned with ‘collecting and disseminating best practice in groundwater development in low-income developing countries’, and will be supported in part through TEAM. The AGID website has become the main way of distributing AGID’s published material, including the AGID journal, Geoscience and Development and the 53<sup>rd</sup> and 54<sup>th</sup> editions of AGID’s Geoscience Newsletter. The Geoethics Newsletter are also posted regularly on the AGID website. A meeting of the Working Group on Geoethics was held at the Pibram Mining Symposium in the Czech Republic.

Peter Bobrowsky noted that AGID was a good organization for decades, and that it has requested only \$1000.

### **Association Pour l'Etude des Argile (AIPEA)**

AIPEA is an old, well-established association, which has a well-defined scientific focus. The association has played an important role in promoting clay mineral research worldwide. It serves a small scientific field, which today is of considerable practical importance (for instance with the increased application in environmental science). The aim of AIPEA is the worldwide promotion of clay research and technology and to foster international cooperation in these fields. These aims are fulfilled by sponsoring international conferences, stimulating young clay mineralogists and by stimulating communications between clay researchers and clay technologists. The group, which has a large number of affiliated clay societies, runs two committees, on Nomenclature and on Teaching. The society offers an award to assist scientists attending the International Clay Conference.

In 2007, AIPEA participated in Euroclay 2007, the Quadrennial meeting of the European clay groups, with 400 participants from more than 40 nations. The Organization instituted an award for the best student speaker and poster at this meeting and the International Clay Conference. The chief products were the annual newsletter and the proceedings from Euroclay 2007. In addition, the IAPEA nomenclature committee has published its' product on the website of the association.

### **Carpathian Balkan Geological Association (CBGA)**

The objective of this group is to promote and encourage joint fundamental and applied geological research, as well as training and specialization, in the Carpathian-Balkan realm. This concerns virtually all branches of the geological sciences (including geophysics), their environmental implications, and related disciplines. CBGA interfaces internationally with IGCP. In 2007, preparation of the 2008 CBGA Council meeting took place in Thessaloniki.

### **Commission for the Geological Map of the World (CGMW)**

CGMW aims to promote, coordinate, publish and disseminate Earth Science maps at a small scale of continental and/or oceanic areas of the World. Geological Surveys or organizations responsible for national geological mapping of all countries and territories of the World are statutory members, whereas others interested groups are allowed to join as Associated Members. Products and activities in 2007 included preparation of the third edition of the Geological Map of the World, the Magnetic Anomaly Map of the World, work on the World Map of Gravimetric Anomalies, and the Andes Hazards Map. Maps in preparation for presentation at the 33<sup>rd</sup> IGC, Oslo, Norway, include the Structural Map of Antarctica, the Structural Map of the North Atlantic Ocean, the International Geological Map of Asia and the International Tectonic Map of Africa. Additional projects include involvement in the OneGeology project, development of an active marketing policy for some products prepared for the general public.

### **Circum-Pacific Council for Energy and Mineral Resources (CPC)**

The Council develops and promotes research and cooperation among industry, government and academia for the sustainable utilization of earth resources in the Pacific Region. Its' "Crowding the Rim Project" has created tools to promote cross-sector international discussion to mitigate regional catastrophes. These tools included: 1) HazPac, short for hazards of the Pacific, is a compilation of digital data on natural hazards, population and infrastructure. See <http://www.hazpac.org>; 2) RimSim, short for PacificRim Simulation is a conflict negotiation simulation that provides an opportunity to address risk in an increasingly interconnected global community; and, 3) The CTR Educational Module, a set of secondary-level classroom curricula, was developed to educate young people and others about risk in the context of the Pacific Rim. Visit their Website at: <http://www.circumpacificcouncil.org/> CPC has requested \$4000.

### **Drilling, Observation and Sampling of the Earth's Continental Crust (DOSECC)**

DOSECC is a not-for-profit corporation whose mission is to provide leadership and technical support in subsurface sampling and monitoring technology for addressing topics of scientific and societal importance. It comprises 54 Member Institutions that provide input to a Board of Directors and President on promoting a coordinated and integrated continental scientific drilling program for the earth science community. Funding for drilling projects comes from numerous international sources, including the International Continental Scientific Drilling Program (ICDP) and various national scientific funding agencies (e.g., United States, Germany, Austria and Switzerland)

Since the late 1990's DOSECC has performed or provided expertise or drilling equipment to more than 35 scientific drilling projects throughout the world. DOSECC's chief accomplishments over the last five years include successful completion of many international drilling projects, design and manufacture of the Global Lake Drilling System (GLAD800), design and manufacture of a suite of soft sediment sampling tools allowing collection of deep sediment samples in lakes and marine environments, and increased interaction with the scientific drilling community. Accomplishments in 2007 included preparation for scientific drilling projects in Argentina, Russia, Israel, Turkey, USA and Ethiopia. The chief products were the 2<sup>nd</sup> Edition of Best Practices in the Development of Scientific Drilling Projects and 2 Scientific Drilling Newsletters (May and October). Anticipated objectives for the next five years include successful completion of many additional international drilling projects, and additional increased education and outreach with the international scientific drilling community. IUGS welcomes this new Affiliate.

### **European Association of Science Editors (EASE)**

EASE (<http://www.ease.org.uk/>) is a non-governmental and not-for-profit organization operated exclusively for the advancement of science editing and educational purposes. Since 2000, it has been a Company Limited by Guarantee in the UK. Membership at the end of the year was just under 900, with the number countries represented being 55; the breakdown of membership remains virtually unchanged at about 14% of members from countries outside Europe. EASE is an international non-governmental organization in a Category C relationship with UNESCO and Category A liaison with Technical Committee 46 of ISO (Information and Documentation Subcommittee 9; Presentation, identification and description of documents). The association was active in 2007 promoting improved communication in scientific journals. EASE is running strong international projects with UNESCO and IUBS (International Union of Biological Science), as well as IUGS.

### **European Association for the Conservation of Geological Heritage (ProGEO)**

ProGEO aims to promote the conservation of Europe's rich heritage of landscape, rock, fossil and mineral sites. It informs a wide public of the importance of this patrimony, its' relevance to modern society, and advising those responsible for protecting our Earth heritage. ProGEO organizes and participates in research into all aspects of planning, science, management and interpretation that are relevant to geoconservation. To involve all countries in Europe, ProGEO exchanges ideas and information in an open forum, and taking a full part in conservation in a global setting, including the formulation of conventions and legislation. In 2007 it continued to work towards an integrated European listing of outstanding geoscience sites, thus enabling full support to be given to the work of other international bodies, as well as to national initiatives towards site protection. To achieve an integrated approach to nature conservation, ProGEO promotes a holistic approach to the conservation of biological and physical phenomena. ProGEO is a new Affiliate of the IUGS.

### **European Mineralogical Union (EMU)**

EMU members are national scientific societies from European countries, including Russia, with only one member per country allowed. It is dedicated to furthering European cooperation in the mineralogical sciences (mineralogy, petrology and geochemistry) and supports conferences within Europe of a high scientific standing and of an international character. In particular, it supports the Experimental Mineralogy, Petrology and Geochemistry (EMPG) and the European Union of Geosciences (EUG) meetings. EMU is an active organization with an excellent track record in organizing Schools, co-sponsoring International Conferences, widely spread over Europe and annually awarding medals for Research Excellence in Mineralogy, Petrology and Geochemistry.

Achievements in 2007 included the ninth School held at Ludwig-Maximilians-Universität München, Germany; the sponsoring of the symposium "Amphiboles: crystal chemistry, occurrence and health issues", Rome (Italy); helping 56 institutional libraries by donating free subscription to European Journal of Mineralogy; the annual "Research Excellence" medal and the establishment of EMU poster prize for the best presentation by a young scientist in mineralogical sciences. Products in 2007 included the European Journal of Mineralogy, for which EMU took part in the scientific and technical preparation, and EMU Notes in Mineralogy, the eighth volume of the textbook series in preparation, connected to the EMU School.

### **Geochemical Society (GS)**

The Geochemical Society encourages the application of chemistry to the solution of geological and cosmological problems. Its membership (around 2000) is international and diverse in background, encompassing such fields as biogeochemistry, organic geochemistry, high and low-temperature geochemistry, petrology, meteoritics, fluid-rock interaction, and isotope geochemistry. The Geochemical Society sponsors (jointly with the European Association of Geochemistry) the V. M. Goldschmidt Conference: a broad-scope conference covering all aspects of geochemistry and cosmochemistry. The Geochemical Society sponsors (jointly with the Meteoritical Society) the professional research journal "*Geochemica et Cosmochemica Acta*," as well as a quarterly newsletter "The Geochemical News," distributed to all members. In addition, the society publishes two book series, the Special Publications Series and, jointly with the Mineralogical Society of America, the Reviews in Mineralogy and Geochemistry Series. The Geochemical Society sponsors (jointly with the European Association of Geochemistry) the V. M. Goldschmidt Conference, a broad-scope conference covering all aspects of geochemistry and cosmochemistry. In 2007, its successful publication program

included the extremely popular Elements Magazine (10,000 copies in circulation), *Geochemica et Cosmochemica Acta*, an on-line only journal Geochemistry, Geophysics, Geosystems, Special Publications Series, and Reviews in Mineralogy & Geochemistry.

### **Geological Society of Africa (GSaf)**

This Society aims to promote the advancement of the geological sciences throughout the African continent by encouraging and supporting education, training, research, the establishment of national societies and local groups and the organization of conferences and other meetings. GSaf has now ca 600 nominal members from 35 African countries and 19 countries outside the continent. The Society does not directly implement scientific projects but continues to encourage members to take the initiative and become involved in international collaborative research. GSaf does not run its' own projects but is involved in bringing African scientists more actively into IGCP projects, and in 2007 African scientists participated as leaders or members of 10 IGCP projects.

The GSaf had a quiet year that mainly focused on IYPE. Funding from IUGS supported the following activities: the 4<sup>th</sup> Colloquium of Magmatism, Metamorphism and associated Mineralization in Morocco; a workshop on soil and sustainable development in inter-tropical African regions in Cameroon; and support of the GSaf President to attend the IYPE Board meeting in Paris. The organization set up a new website and initiated African Geonews, the newsletter of GSaf, and a flyer of the society was distributed to the participants during the conferences and is also on the website. GSaf also encourage their members to publish papers in Journal of African Earth Sciences and Africa Geosciences Review, as well as in Episodes. It is involved in the publishing of African Geology. GSaf was also active in promoting the African National Committees of IYPE and the formation of national societies. Visit the Website at [www.geologicalsocietyofafrica.org](http://www.geologicalsocietyofafrica.org)

GSaf has requested \$5000 to support scientists attending conferences

### **Geological Society of America (GSA)**

The GSA is a broad, unifying scientific society, which aims to foster the human quest for understanding the Earth, planets, and life, catalyzing new scientific ways of thinking about natural systems and applying geoscience knowledge and insight to human needs and aspirations and stewardship of the Earth. There are now more than 20,000 members. Future annual meetings are now planned through 2011 (2007 – Denver; 2008 – Houston; 2009 – Portland, 2010 – Denver, and 2011 – Minneapolis). Important initiatives undertaken in 2007 were: 1) Increasing GSA's international membership and enhancing GSA's global image. The GSA Website and other GSA materials will be made more accessible to international members. The overall goal is for GSA to expand internationally, building on its reputation as one of the premier geological societies in the world. 2) Improving and optimizing the interactions between GSA and its Allied and Associated Societies. 3) Awarding the first Geological Society of America President's Medal on Professional Golf Association champion Phil Mickelson and his wife Amy for their work publicizing the need for improved teaching of physical science and math in elementary schools. Visit the Website at <http://www.geosociety.org/>

### **Geologische Vereinigung (GV)**

Geologische Vereinigung has 1600 members in 64 countries; but its Executive Committee is almost entirely Germanic. GV promotes the Earth sciences within the framework of modern society; fostering

understanding between individuals, organizations and institutions is regarded as being an important part of its role, which it undertakes through promoting Annual Meetings, short courses and excursions. The society communicates with its members by GMit (Geowissenschaftliche Mitteilungen), a quarterly communiqué jointly edited with the other earth-science societies of Germany, and its website. The ranking of the International Journal of Earth Sciences (Geologische Rundschau) improved, as reflected by journals citation index. GV spends about 12% of its budget for public relations. The GV has started a new series of publications with Springer Verlag, entitled Frontiers in Earth Sciences. In 2007 the Annual Meeting took place in Bremen ("The Oceans in the Earth System"). Special support was provided for students to attend the meetings and courses. Visit the Website at <http://www.g-v.de/>

### **International Association for Engineering Geology and the Environment (IAEG)**

The IAEG is devoted to the investigation, study and solution of engineering and environmental problems, which may arise as the result of the interaction between geology and the works and activities of man as well as to the prediction and the development of measures for prevention or remediation of geological hazards. IAEG is a worldwide scientific society with more than 5500 members in 66 National Groups and in individual memberships. The Association cooperates with a number of other international bodies (IAH, ISRM, ISSMGE and GEMS) expects to cooperate with these groups on several topics including education and training, professional practice, sustainable use of underground space, ancient monuments, soft rocks and indurated soils. The Association publishes The Bulletin of Engineering Geology and the Environment, distributes a newsletter and runs nine Commissions. Every two years a medal and a prize are awarded: The Hans Cloos Medal (senior award) and the Richard Wolters Prize, the latter specially recognizes meritorious achievement by a younger member of the engineering geology profession. Visit the Website at <http://www.iaeg.info/>

### **International Association of Geomorphologists (IAG)**

IAG (<http://www.geomorph.org/>) was founded to promote and develop collaboration in geomorphology between nations; affiliation is via National Scientific Members. It is an extremely active scientific association with 39 national members. IAG runs a number of working groups and task forces, such as those on Arid Regions, Geoarchaeology, Large Rivers, Volcanoes, Geomorphological Sites, Sediment Budgets in Cold Environments, Rocky Coasts Geomorphology, Human Impact on the Landscape, Earth Systems, Geomorphological Hazards, Global Change and Geomorphology, Geomorphological Mapping and Planetary Geomorphology.

The Association also sponsors conferences and publishes scientific material. IAG's income is derived from annual fees paid by affiliated National Scientific Members and from scientific publications royalties. Most of the income serves to run a number of working groups and to support training activities for young geomorphologists, mostly from developing countries. Changes in the IAG constitution now give member organizations from low income countries exemption from fees provided they submit annual report of their activities. IAG is very active in publishing, and they have a very positive approach to cooperation with other scientific bodies. There are now fifteen Working Groups, many with no financial support from IAG. There is some income from membership fees, but considerable income from book royalties (e.g. Encyclopedia of Geomorphology) and their website ([www.geomorph.org](http://www.geomorph.org)) is extremely popular. IAG are actively seeking new members and will continue to promote geomorphology to young students. Publication with Wiley will continue. IAG are quite self sufficient and will be a major force on behalf of IYPE. They have a long history of being very successful. IUGS is fortunate to have IAG as an Affiliated Organization.



### **International Association of Geochemistry (IAGC)**

The IAGC is a pre-eminent international geochemical organization with over 500 members, whose prime objective is to foster co-operation in, and advancement of, geochemistry in its broadest sense. IAGC celebrated its 40<sup>th</sup> anniversary in 2007. They sponsor meetings and publications organised by Working Groups to study problems that benefit from international co-operation.

Three main meetings were held in 2007: WRI (Water-Rock Interaction) 12<sup>th</sup> Symposium in Kunming, China, attended by 420 people from 25 countries; the Goldschmidt International Geochemistry Conference in Germany in August; and a meeting on Applied Isotope Geochemistry in Stellenbosch, South Africa. The association publishes the Elsevier journal Applied Geochemistry, with 12 issues annually. In 2007, the journal opened for electronic submission of papers, but kept the alternative also to submit paper copies. After that time 166 papers were submitted electronically. The association has a number of awards, for example, the most distinguished scientist, the scientist who published the best paper in Applied Geochemistry and the best young scientist (younger than 35 years in age).

### **International Association on the Genesis of Ore Deposits (IAGOD)**

The Association's principal objective is to foster cooperation in, and advancement of, geochemistry and cosmochemistry in their broadest sense by working with any interested group in planning symposia and other types of meetings related to geochemistry, by sponsoring publications on topics not normally covered by existing organizations; and by the appointment of Working Groups to study problems that require, or would profit from, international cooperation. IAGOD plays a vital role in ore deposit research, together with other bodies (SGA, SEG, IGCP), with whom they cooperate. It is noteworthy, how much is achieved by IAGOD with small financial contributions by its membership. IAGOD is an Associate Partner in the International Year of Planet Earth.

In 2007 IAGOD concentrated on preparations for field workshops in 2008-2009 and the next Quadrennial Symposium in 2010. It also sponsored a few other conferences. A new volume in the IAGOD Guidebook series, Magmatism and Metallogeny of the Altai, was published. Three new volumes of Ore Geology Review were also published. A new working group on uranium was established and IAGOD continued to work towards a successful mineral resources contribution to IYPE. Likewise, members of the IAGOD working group on tin and tungsten continued to contribute towards the compilation of a digital database on global tin and tungsten deposits.

### **International Association of Hydrogeologists (IAH)**

IAH (<http://www.iah.org/>) aims to advance public education and promote research in hydrogeological sciences. IAH is an organization of more than 3700 individual members from over 140 countries. In parallel with the preparation for the World Water Forum, IAH continues in international partnership projects with UNESCO.

The 35<sup>th</sup> Congress on the subject of Groundwater and Ecosystems was held in Lisbon, drawing nearly 600 attendees from nearly 60 countries. There were in total 400 scientific contributions supporting the 12 keynote lectures at the Congress. In addition the Congress hosted a number of side meetings and special sessions organized by bodies such as UNESCO, UNEP and the European Commission as well

as IAH commissions and working groups. IAH, through its Commissions and Chapters, organized and cosponsored over 30 groundwater related meetings around the world.

IAH continued its' active participation with bodies responsible for water management in the UN-system. The most significant program IAH participated in is UNESCO's Hydrogeological Map of the World (WHYMAP) which aims at studying the problems of managing trans-boundary aquifers and GWES (Groundwater in Emergency Situations). WHYMAP project has reached a major landmark with the preparation of a 1:25,000,000 groundwater Resources Map of the World during 2007. IAH's periodical "Hydrogeology Journal" is one of the most cited international journals dealing with groundwater issues. It is now in its 15<sup>th</sup> volume and has 8 issues per year. The theme issue of IAH publication in 2007 was on the topic "Remote Sensing and GIS in Hydrogeology". In 2007 more books were published in IAH series than in any previous year. There has been a continuing focus on updating administrative systems with a major review and upgrade of the IAH web site completed during 2007. IAH is an Associate Partner in the International Year of Planet Earth.

Zhang Hongren is a lifetime member of IAH.

### **International Association for Mathematical Geology (IAMG)**

This specialized Association aims to promote international cooperation in the application and use of mathematics in geological research and technology. This is done through the organization of meetings, field excursions and visits to centres of research and technology, through publications and through cooperation with other professional organizations. A Student Grants Programme supports graduate student research in broad areas of mathematical geology for the purposes of advancing the development and application of quantitative methods in the geosciences. The Association publishes Computers & Geosciences (now on-line), Mathematical Geology and Natural Resources Research. In 2007, the IAMG held its annual meeting in Beijing, focusing on geomathematics and GSI analysis of resources, environment and hazards with more than 400 participants. This is a remarkably big number considering that the IAMG has only 600 members. Visit the Website at [www.iamg.org/](http://www.iamg.org/)

### **Action Item 21**

Secretary General will contact IAMG and request that IUGS be formally added to their Constitution and that they abide by IUGS Statutes and Byelaws pertaining to Affiliate Organizations.

### **International Association of Sedimentologists (IAS)**

IAS (<http://www.iasnet.org/>) promotes the study of sedimentology through publications, discussion and comparison of research results, by encouraging the interchange of research through international collaboration and by favouring integration with other disciplines. The IAS held the annual meeting in Greece, and co-sponsored meetings in a number of countries in 2007. The society ran a lecture tour by distinguished sedimentologists worldwide in Mexico, USA, Spain, Italy, Australia, Switzerland, Croatia, Poland, Hungary, and Greece. They published 6 issues of the journal, Sedimentology. Their efforts to encourage young sedimentologists are highly appreciated. The IAS homepage is regularly updated.

### **International Centre for Training and Exchange in the Geosciences (CIFEG)**



The International Centre for Training and Exchange in the Geosciences (Centre International pour la Formation et les Echanges en Géosciences, CIFEG) promotes the exchange of geosciences between northern and southern hemisphere countries through supporting training and research programmes; essentially it aims to promote bilateral knowledge sharing. The group runs two main projects; PANGIS – Pan-African Network for a Geological Information System and SANGIS – South East Asian Network for a Geological Information System. In 2007, CIFEG participated in the official opening of the IYPE, assisting African students from several countries to attend the global launch event. Also, the AEGOS project received support from many organizations in different countries. The PANGIS program continued with a specific training in Angola during 2007, with new plans to operate SANGIS in Vietnam and Cambodia next year. Visit the Website at <http://www.cifeg.org>

### **International Consortium on Landslides (ICL)**

ICL (<http://icl.dpri.kyoto-u.ac.jp/>) is involved with international coordination, exchange of information and dissemination of research activities and capacity building through various meetings, dispatching experts, developing a landslide database, and publishing its journal “Landslides”. ICL’s central activity is the International Programme on Landslides (IPL). The construction of the headquarter building of UNITWIN (university twinning and networking) was jointly conducted by ICL, UNESCO and Kyoto University. ICL has strong links to UNESCO and WMO: and is well supported by these UN organizations. Although it only has about 40 member organizations, ICL has a broad international membership with a strong bias in favour of Japan. There is considerable scientific focus, with minor attention to the public or education of young scientists.

The First IPL Global Promotion Committee meeting and the IPL Symposium 2007 “Landslide Risk Analysis and Sustainable Disaster Management” was held at the United Nations University in Tokyo, where a 25 presentations and discussions were conducted. The First Council Meeting of the IPL World Centre was organized in Kyoto, with 19 members attending the meeting. Also in 2007, the ICL was approved as a NGO and official relationship with UNESCO. Planning for the First World Landslide Forum continued throughout the year at meetings in Vail, Colorado and at UNESCO Headquarters in Paris. The 2007 Varnes Medal was awarded to Prof. Edward Derbyshire (UK) in November at the Board of Representatives meeting in Paris. During the meeting, a MoU to promote IPL and 2006 Tokyo Action Plan between ICL and FAO was signed and exchanged. In addition to the journal “Landslides,” ICL release a full colour book entitled “Progress in Landslide Science” edited by Kyoji Sassa, Hiroshi Fukuoka, Wang Fawu and Wang Gonghui, and published by Springer Verlag. A 6-page full colour leaflet was published to present the 2006 Tokyo Action Plan, IPL, ICL and the First World Landslide Forum. Also, the proceedings of the 2007 IPL Symposium “Landslide Risk Analysis and Sustainable Disaster Management” were published in CD format.

ICL has requested \$15,000 to support the First Landslide Forum in Tokyo.

### **International Federation of Palynological Societies (IFPS)**

Currently, 22 societies are members of IFPS (<http://www.geo.arizona.edu/palynology/ifps.html>) and the number of affiliated palynological societies and members increased in 2007. Bonn, Germany is the site of the next, IPC-XII in August 2008. A third edition of the World Directory of Palynologists contains a list and contacts for about 3000 palynologists in all parts of the world. The 2007 issue of PALYNOS, the newsletter of IFPS, mainly dealt with announcements for future meetings and contained an update of personnel.

### **International Geological Education Organisation (IGEO)**

This organization promotes education in the geosciences at all levels, works for the enhancement of quality in the international provision of geoscience education and encourages all developments that raise public awareness of the geosciences, in particular amongst younger people. A Syllabus Commission, chaired by Professor Nir Orion from Israel, decided the scope/content of the written and practical tests for the Olympiad held mid 2007. IGEO worked closely with COGE.

In 2007, the 1<sup>st</sup> International Earth Science Olympiad, one of the major activities of IGEO and an outreach activity of IYPE, was held in Korea. IGEO is also supporting the “Earth Learning Idea” initiative, and an IGEO past president is currently publishing new ideas for teaching Earth Science throughout the entire IYPE. IGEO is also hosting a symposium on “Geoscience education for the 21<sup>st</sup> century” in Oslo. Also as part of IYPE, the First National Programme on E-Geoscience and Environmental Teaching and Learning (EGETL) was launched in India.

### **International Medical Geology Association (IMGA)**

Achievements in 2007 include a monthly electronic newsletter and paper bulletin annually, several short courses per year, and a very useful website. It has participated in numerous conferences, developed university credit courses, and published a very popular Academic Press volume that has won several awards. Medical Geology remains active as a theme for IYPE. IUGS is very fortunate to have this new organization as an affiliate and a very positive relationship for our Union to maintain. IMGA is contributing to the next IGC. IMGA has a good working relationship with IYPE.

### **International Mineralogical Association (IMA)**

IMA comprises 38 mineralogical societies or groups (one per country) with a limited number of individual memberships. The Association promotes exchanges amongst mineralogists of all nations by organizing events or publishing relevant literature. IMA is a very important organization and IUGS promotes the more intensive use of its expertise by other IUGS bodies and projects.

### **International Palaeontological Association (IPA)**

IPA's 1200 members and nineteen corporate member organizations aim to promote and coordinate international cooperation in palaeontology and to encourage the integration and synthesis of all palaeontological knowledge (<http://ipa.geo.ku.edu/index3.html>). The new homepage contains a link to fossil collections of the world, to a very popular directory of palaeontologists and to a PalaeoLink database. The IPA has Associate Partner status in sponsorship of the International Year of Planet Earth (2007-2009).

The year saw expanding and fruitful activity. An important and growing activity of IPA is related to the project “PaleoParks – The Preservation and Conservation of Fossil Sites World-Wide.” This project is developing in cooperation with the European Geopark Network. IPA accepted the invitation to join ProGEO, which is also affiliated to IUGS. The Organization supported the NSF's “Assembling the Tree of Life” program and worked in cooperation with the Paleobiology Database (National Center for Ecological Analysis and Synthesis, Santa Barbara, CA, USA) in all that concerns the new molecular

clock calibration points, long-term trend in biodiversity and the data compilation and processing. IPA actively uses the outreach potential of the Internet. The popular IPA website (over 1000 hits a month), the Directory of Paleontologists of the World, the Directory of the fossil collections of the World, and the Paleolink Database make IPA an effective and dynamic organization.

### **International Permafrost Association (IPA)**

The objectives of IPA (<http://www.geo.uio.no/IPA/>) include the dissemination of knowledge concerning permafrost and the promotion of cooperation between persons and organizations engaged in scientific investigations and engineering work on permafrost. Some 24 national/multinational organizations form the basis of the membership, although individual membership is possible if no national body exists. Ten working and three task groups covering a range of topics undertake scientific work for the Association; many of these are involved in collaborative work with a very wide range of international bodies, including IUSS, IPA, IGU, the International Commission on Snow and Ice, and with bodies within IGOS (GCOS/GTOS). The Association publishes *Frozen Ground* and contributed special issues to several other journals. The group has continued developing “Thermal State of Permafrost” (TSP) which proposes to obtain a “snapshot” of permafrost temperatures throughout Planet Earth during the period 2007–2008. The post-IPY and Planet Earth “Legacy” goal for the TSP project is to establish a permanent International Network of Permafrost Observatories (INPO). Several relevant working groups are considering ways to input to the themes of the International Year of Planet Earth (including soils, hazards and climate). IPA is an Associate Partner in the International Year of Planet Earth. A major project is: “Thermal State of Permafrost” (TSP), which together with WMO Global Terrestrial Network for Permafrost (GTN-P) supports IUGS Geoindicators Initiative, and will result in the establishment of a permanent International Network of Permafrost Observatories (INPO). IPA is also an affiliated member of the IGU. Co-operation in different programmes sponsored by ICSU (IGBP, SCAR, SCOPE), WMO, IGU, IUGG, INQUA, ICO, IASC, IUSS, IUBS, IUMS, places IPA at the crossroads of important scientific research projects on climate related subjects.

This past year saw the formal beginning of the International Polar Year, in which IPA is heavily involved. Preparations continue for 2008 and the 9<sup>th</sup> International Conference on Permafrost, to be held in Fairbanks, Alaska, USA, at which the IPA will recognize its 25<sup>th</sup> anniversary.

### **International Society for Rock Mechanics (ISRM)**

The ISRM (<http://www.isrm.net/>) operates in the field of physical and mechanical behaviour of rocks and rock masses and the applications of this knowledge for the better understanding of geological processes and in the fields of Engineering. The ISRM website provides information about the association, its national groups, commissions and meetings. The group continues close co-operation with the Sister Societies IAEG and ISSMGE. The Society envisages planning and undertaking certain scientific activities with IUGS, such as the study of geological problems. The Association published *News Journal* and developed a web site. However, the increase of publication costs is becoming a serious issue. The ISRM is seeking to form a federation with the IAEG and ISSMGE. ISRM published proceedings, commission reports, and news journal and their *Blue Book* in 2007.

### **International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)**

The aim of the Society (<http://www.issmge.org/home/>) is to promote international co-operation amongst engineers and scientists for the advancement and dissemination of knowledge in the field of

geotechnics, and its engineering and environmental applications. The ISSMGE is composed of 75 national societies and has over 17,000 individual members. The Society has 23 technical committees, which are asked to produce reports by 2009. A Newsletter of interest to the younger members will be re-launched soon.

The main educational activity is the ISSMGE touring lectures (now renamed as ISSMGE International Seminar), delivered in developing countries such as Albania, Vietnam, Costa Rica, El Salvador, Indonesia, China, Hungary and Sri Lanka in 2007. The society held a number of regional conferences on SMGE in 2007, including meetings specially organized for young engineers, e.g., Young Geotechnical Engineers Conferences. The society publishes a Bulletin and newsletter La Letter, which is focused on poorer French speaking countries. As an overarching structure in this field, ISSMGE is doing important promotional activities in geotectonics.

### **Meteoritical Society (MS)**

The Society, founded in 1933, promotes research and education in planetary sciences, with an emphasis on studies of meteorites and other extraterrestrial materials that further the understanding of the origin of the solar system. The society has around 950 members in 37 countries. The Society publishes its own journal, Meteorites and Planetary Sciences and also the Meteoritical Bulletin. Members donated ten subscriptions of the former journal to libraries in countries where the journal is unavailable. The Society publishes *Geochemica et Cosmochemica Acta*, together with the Geochemical Society. Visit the Website at: <http://www.meteoriticalsociety.org/>

### **National Groundwater Association (NGWA)**

The National Ground Water Association is the newest affiliated organization of IUGS. NGWA is dedicated to advancing the expertise of all ground water professionals and to furthering ground water awareness and protection through education and outreach.

NGWA convened and was involved in a number of conferences in 2007 including: the 2007 NGWA Thesis Conference on "Conjunctive Management of Ground Water and Surface Water: Application of Science to Policy", NGWA's Naturally Occurring Contaminants Conference, and the fourth Conference on "Hydrogeology, Ecology, Monitoring, and Management of Ground Water in Karst Terrains". NGWA's journal, *Ground Water Monitoring & Remediation*, was modified to include a broader spectrum of technical articles. NGWA Members formed the Association's eleventh interest group focusing on hydrogeologic settings where ground water is unusually deep. The organization is also working together with the Environmental Education Council of Ohio to introduce more ground water-related science in schools. Working with the Developing Countries' Interest Group, NGWA developed a volunteer database for members with an interest in providing their water supply and/or sanitation knowledge and skills in developing countries. NGWA reached cooperation agreements with the Korea Ground Water Association and the International Association of Hydrogeologists. The organization's 7,000 square-foot exhibit, "Water: H<sub>2</sub>O=Life" has joined a large traveling exhibit on water that will tour the world's leading science museums. Ground water and surface water interaction is demonstrated in a new 20-minute DVD-based video animation funded by NGWA. An online database containing 17,000 citations of papers and articles from NGWA publications *Ground Water*, *Ground Water Monitoring & Remediation*, *Water Well Journal*, and selected NGWA conference proceedings, with attached PDF files of the articles and papers is now available from the NGWA Web site.

### **Society of Economic Geologists Inc. (SEG)**

This Society is an international body that is committed to excellence in science, discovery, documentation, interpretation, evaluation and responsible development of mineral resources and the professional development of its members. SEG formed a tripartite relationship with IAGOD and SGA, and also has a good working relationship with IUGS. Members are currently distributed through more than 80 countries worldwide. SEG is a leading international society in its field, and having co-sponsored meetings with many national and international organisations, including UNESCO, indicates its relevance for important society issues. SEG is closely associated with IAGOD, forming an ICSU cluster. SEG is playing a modest role in IYPE as an Associate Partner and resources are a key issue.

In 2007, the SEG organized, sponsored, or participated in 27 professional meetings including the conferences, workshops, symposia, field courses, and field trips worldwide. The Society successfully developed the SEG Lecturers program conducted by the top professionals in the categories of International Exchange Lecturer, Thayer Lindsley Lecturer, Regional Vice President Lecturer, Distinguished Lecturer and Honorary Lecturers. These lectures are very well accepted internationally, many presentations are available for sale on DVD. Publications included the *SEG Newsletter* and *Economic Geology*, and the organization introduced a new line of publications, *SEG Compilations* that reviews all important paper and books published by SEG. In the sphere of education, the SEG Foundation awarded 64 student research grants at 35 universities in 12 countries, and in new graduate fellowships where 12 students at 9 universities in 4 countries were supported.

### **Society for Geology Applied to Mineral Deposits (SGA)**

The Society aims to advance the application of scientific knowledge to the study and development of mineral resources and their environment, to promote the profession and to improve and maintain professional standards. SGA was active in 2007, mainly in co-sponsoring five scientific meetings, editing the journal “*Mineralium Deposita*” and SGA News. The journal is confirmed to be number one amongst Mineral Deposits Journals worldwide. SGA is an Associate Partner in the International Year of Planet Earth. The SGA Young Scientist Award is granted biannually to a scientist aged 37 or under who has contributed significantly to understanding of mineral deposits. SGA has a joint project with other societies (SEG, IAGOD) to produce an educational DVD movie entitled “Promoting Responsible Mineral Resource Management for the Planet Earth.”

Activities in 2007 included the 9<sup>th</sup> SGA Biennial Meeting “Mineral Research and Exploration: On Common Ground” in Dublin, Ireland as a major SGA contribution to the IYPE. There are a number of co-sponsored meetings arranged jointly with UNESCO, SEG, GAG and MAC during 2007-2009. The Society continued to publish its journal *Mineralium Deposita* and two issues of the *SGA News*. SGA also presented its awards for the best paper in *Mineralium Deposita* and Young Scientist Award. In 2007 the Society established SGA-Newmont Gold Medal, with the first medal presented to Dr. Zdenek Johan (France).

### **Society for Sedimentary Petrology (SEPM)**

SEPM (<http://www.sepm.org/>) is an international not-for-profit Society dedicated to the dissemination of scientific information on sedimentology, stratigraphy, palaeontology, environmental sciences, marine geology, hydrogeology, and many additional related specialties. SEPM was active in 2007. The Society supports two major scientific journals, the Journal of Sedimentary Research (JSR) and

PALAIOS, in addition to producing technical conferences, short courses, and Special Publications. The foundation is also playing a key role in supporting the digitization of the past issues of PALAIOS. SEPM is an Associate Partner in the International Year of Planet Earth. Excellent papers have been published in the Journal of Sedimentary Research.

In 2007 SEPM held its' Annual Meeting in Long Beach, California, jointly with AAPG. Ten short courses and field trips were sponsored. In addition, SEPM sponsored one research conferences: Ichnological Applications to Sedimentological and Sequence Stratigraphic Problems, held in Price, Utah and a Symposium on "Changing Paradigms in Carbonates". The Journal of Sedimentary Research continued publishing top-quality papers; PALAIOS prospered and made some significant changes, which included going to online only submission. The Sedimentary Record, the full colour member magazine, continued into its fifth year. SEPM Foundation, Inc. continued to award student grants to those pursuing research in sedimentary geology. To date over \$300,000 has been dispensed from the foundation.

## **6) REPORTS ON CO-OPERATIVE ENTERPRISES**

### **6. a. Earth Sciences in UNESCO**

Peter Bobrowsky opened by stating that good working relationships are maintained with UNESCO and key projects (e.g., GARS); and that Bureau meetings are often held in the Paris office. Robert Missotten followed, thanking the IUGS for the invitation to the 58<sup>th</sup> EC Meeting. He began by cautioning that the geoscience community needed to be heard amongst the other ISCU members, and was astonished that UN Member States do not recognize the need for strong science. Peter Bobrowsky pointed out that ICSU relations are poor, and the GeoUnions have expressed frustration about exclusion. In this respect, collaboration with other unions can be effective (e.g., with INQUA, IUGG).

Missotten continued: water continues to be a priority in UNESCO, although others are considered. For example, the responses to the SE Asia tsunami highlights that Hazards are also an important priority. Therefore, Member States have decided that Society and Science are important, and Science Policy needs to be stressed along with Science Education; they also see the need to de-centralize activities.

Another important priority is Climate Change: here there are possibilities for outreach and make opportunities for fundraising. UNESCO is attempting to develop a working language to share information with economists to fund geological research. The Division Director was in contact with petroleum and mining companies on the topic of Geoheritage. The Insurance Industry is another source of funding and cooperation.

Medical Geology, which started in the sphere of IGCP, has since moved out. IYPE has been successful, thanks to the support of IUGS. UNESCO would be interested in collaborating with IUGS on a Sustainable Development initiative. UNESCO will be facilitating an ICOGS revolution. Missotten recognized new steps for a new approach, with more possibilities of linkage between organizations over proposals.

With regard to IYPE, an important step has been building links with Member Nations. Some 70 Member States have created National Committees. Missotten saw the need for better briefing material for National Committees. The Director General was impressed by the youth participating in the IYPE Opening Event in Paris. The Year will also be mentioned at the opening of the Beijing Olympics. Outreach is very effective, with student competitions an important element and a number of IYPE books in press. He was pleased that IUGS was discussing outreach with its Affiliated Bodies. Some 75 journalists attended the IYPE Launch and Missotten hopes IYPE, UNESCO and IUGS build on future relationships with the Press.

### **6. b. IUGS-UNESCO International Geoscience Programme (IGCP)**

Robert Missotten then moved to the IGCP, stating this was a priority of UNESCO despite budgeting problems. The concepts of IGCP proposals have been revisited and reoriented with IYPE, including: geoscience of the water cycle, geohazards, resources, global change and earth, sustainable society and life. IUGS played a major role in reducing 150 applicant proposals to 50 for the Scientific Board. Missotten also emphasized the importance of IGCP websites and thanked the IUGS for their review of 33 key projects. He suggested IGCP should approach Member States for resources. China, USA and Ireland all support IGCP, and



the Euro GeoSurveys also cooperate. ICOP has also expressed interest in support. After summarizing Missotten's report, Eldridge Moores proposed the following action items:

**Action Item 4**

IUGS will stress cooperation and ties between Member States, UNESCO and IGCP National Committees.

**Action Item 5**

Secretary General will write a letter to each IGCP project suggesting they contribute to the IGC (separate letters also to be sent from IGCC and UNESCO); Secretariat to forward contact addresses to IGCC and UNESCO parties).

**6. c. IUGS-UNESCO Programme on Geological Application on Remote Sensing (GARS)**

Antonio Brambati reported on GARS and IGOS, stressing that some 40 institutions and 28 countries were contributing to a wide range of activities in 2007, including 10 workshops. Following the direction of UNESCO, most activity is focussed on Water. Brambati noted there was a well-defined strategy for the next five years, and there will be a strong presence in Oslo.

**6. d. IUGS-IUGG International Lithosphere Programme (ILP)**

Peter Bobrowsky noted that this was an IUGG-IUGS venture, and that Jean-Paul Cadet was representing the Bureau. Cadet remarked that it was a very effective new scientific venture receiving \$17,000 each from IUGG and IUGS. There were some technical problems dealing with continental lithosphere, so the emphasis is now on ocean lithosphere. It is also not so Euro-centric now. Cadet cautioned that IUGS should maintain its visibility as this organization grows. Eduardo de Mulder was concerned that IYPE money may go to IGCP at the expense of ILP.



## **7) INTERNATIONAL GEOLOGICAL CONGRESS (IGC)**

### **7. a. 33<sup>rd</sup> IGC in 2008**

Arne Bjørlykke opened by thanking the IUGS for the invite to the 58<sup>th</sup> EC Meeting; then reported that preparation for the Congress was more or less following the planned schedule. He noted that interest for the 33<sup>rd</sup> IGC is high in the forms of abstracts and Geohost applications. The budget was balanced with the help of the Norwegian Government and private sponsors. Bjørlykke noted, however, that there were still many unresolved challenges.

The abstract deadline was February 29. Because there seemed to be some problems with the server, the deadline was extended to March 7. The total number of submitted abstracts was 6080 by late March. In addition there will be more abstracts for the plenary thematic days. There are abstracts from 116 countries; with more than 650 abstracts from Russia. About 1000 participants had registered by the time of the EC meeting.

Bjørlykke noted that the budget is under control and that the IGCC was still working to obtain more funds although all main elements of the Congress are now covered. Extra sponsorship income will be used to improve the Congress, as well as securing more funds for “unexpected expenses”.

Some 950 Geohost applications were submitted. The committee met on February 14; about 570 applicants have received a message that they have received a stipend. The IGCC has awarded combinations of registration fees and accommodation. Travel grants have not been included. In total 4.2 million NOK was awarded (ca. 525,000 Euro) before April 2008.

Work on setting up the Science programme is under way although there are still several symposia (of the 460) without abstracts or with very few abstracts. The Science Committee met on March 13 and started work on merging symposia. The final number of symposia is expected to be in the order of 350 (+/- 25). At the time of the EC meeting, Themes of the Day were complete for 4 of the 7 days; this is an important outreach activity with teachers and the public invited to attend with a special fee.

Of the original 56 excursions, some have been cancelled: the total number offered in the end was 50. The Science Committee is working on the excursion programme and will offer alternatives to those registered for excursions which obviously have too few participants to run. There now 15 excursions confirmed and with a total 20 to 25 of the excursions projected to run.

Bjørlykke noted that due to the large capacity of rooms in the Hotel Arena and in the venue, the IGC will be able to offer a large number of organizations good meeting facilities. An event company is working on the opening ceremony. Of the ca. 1000 registrants in March, there is much interest in the ceremonies, as well as the other events like opera performances, a Jazz/rock club and BBQ dinner.

Eldridge Moores wanted to know how many participants would be expected. Bjørlykke suggested somewhere in the 6000-7000 range. Robert Missotten stressed the need to talk with politicians about the importance of outreach and asked about the costs for exhibits and exhibitors (4000-5000 NOK). Sylvi Haldorsen noted that excursions were costly and pondered the connection with the large number of cancelled trips. Bjørlykke and Jean-Paul

Cadet suggested the establishment of a Geoscience World Congress if the IGC was successful.

Peter Bobrowsky said that IUGS appreciated all the work by Arne Bjørlykke, and asked whether one of the goals was to get people to give one or multiple talks. Bjørlykke replied that the quality of the presentations and papers was more important; and stressed that there was little benefit in having people submitting abstracts then not attending. There is a cost benefit to having separate fees for each abstract submitted. Bobrowsky suggested that a one-time fee for multiple abstracts would have encouraged more abstracts.

Arne Bjørlykke then ran through some of the contributions to sessions, adding that the Chair of the IGPC will attend. Examples of contributions included: 450 for Mineral Deposits, 230 abstracts for Geohazards; >1000 abstracts for Regional Geology; mostly for Polar Regions, Europe and Asia. There were also a number of abstracts for Climate Change, Environmental Geoscience, Geo-Energy (and Petroleum Geoscience), Historical Geology and Palaeontology. Paleobotany was under-represented. Bobrowsky and Haldorsen noted that Quaternary papers were low in representation because of INQUA's recent meeting, but at least had a presence in Geohazards and Applied Geology. Bjørlykke suggested IUGS could coordinate with other Unions to minimize overlaps on some sessions and competition from other Congresses and Conferences.

#### **7. b. 34<sup>th</sup> IGC in 2012**

Ian Lambert reported that preparations had begun in earnest for the 34<sup>th</sup> IGC (also known as Australia 2012). The congress would be held 2-10 August, 2012, in Brisbane, Queensland. The request for tender for the professional conference organiser (PCO) was distributed in late 2007 and five proposals are under review. The selection panel interviewed the prospective PCOs on 3 April and the full IGC preparatory committee were asked to endorse the selected company on 24 April.

The AGC (legal entity for the 34<sup>th</sup> IGC) signed an agreement on 3 April with Queensland Events Corporation, which will result in funding in support for international promotion of Australia 2012. Geoscience Australia has continued to provide strong support for the organisation of the 34<sup>th</sup> IGC and will send over 20 officers to the Oslo IGC as part of Oceania's major promotion there. The state and Northern Territory geological survey agencies and GNS Science (New Zealand) are also providing good support. There are preparations for a promotional video for the closing ceremony at Oslo and a strong Oceania Symposium for the preceding day.

Sylvi Haldorsen suggested a focus on mapping of geohazards, resources and climate change in Oceania. Ian Lambert commented that One Geology will be given a priority, because by 2012, most of its outcomes should have been achieved; and also noted that unearthing the past and a sustainable future would be emphasized. Registration costs would be on par with Oslo, and between 4000 and 7000 participants might be expected. Haldorsen expected money transfer technologies may change over the next 4 years, making it easier to register.

Robert Missotten indicated that UNESCO wants to collaborate with the IGC and wondered whether a more permanent relationship with ICOG may be explored. Arne Bjørlykke noted that there had been an ICOG session at the IGC for the last 16 years. A more permanent

organization is to be discussed at the IGC session (August 11-12). He also stressed that One Geology is an important interface between Geological Surveys.

He then asked whether there would be an IUGS meeting at the end of the IGC; Peter Bobrowsky replied that there would be a last minute closed meeting of the EC before the start of the meeting and a meeting of the newly elected EC at the end to decide on the timing of their first Bureau meeting. He also thought it important for all of the EC to participate in the IGC. Missotten was impressed by what was planned for the IGC, and stressed the difficulties of linking geoscience communities with politicians because they focus on major social issues. Bjørlykke noted that there would be politicians involved in IGC33 on each thematic day. Conflicts with the 2008 Beijing Olympics and holidays were also raised.

### **7. c. IUGS and IGC cooperation**

Zhang Hongren first addressed the problem of the merger or integration of IUGS with IGC and discussed two main views emerging from discussions:

**Alternative 1** Arguments to keep IGCC and IUGS separate were that this situation has been the case through all previous IGCs. The IGCs have a wider scope and a longer history than the IUGS. They are also open to non-IUGS member countries and organisations. There is need to ensure the transition of experience from one IGC to the next ones.

**Alternative 2** Arguments for IGCC being a committee at the same level of the EC within the IUGS include that this would rationalise the organisation and committee meetings. Furthermore, IGCC needs to be under a legal entity, such as the IUGS, and close connection to IUGS is ensured by the Bureau of IUGS being permanent members of IGCC.

The IUGS-IGC relationship has long been a topic of concern for the world geological community, and there was a strong desire to merge the two. The reason was that the IGC is the Forum of the world geological community; whereas the IUGS is the Union of the world geological community.

Since the Councils are almost identical, the geological community they represent are consequently almost identical except for some minor differences (e.g., the IGC has slightly wider scope). Even when the Congress become a forum of IUGS, it is not difficult to widen the scope of the Congress beyond the members of the Union. Due to the similarity between the IUGS and IGC Councils, the representatives of their member countries almost unanimously agreed to merger these two Councils into one in Florence.

What to do next along the line of merger? Most IUGS people think by integrating the Statutes of IUGS and IGC, everything will be just fine. In reality, it is not that simple. Some people, especially those, who are responsible for sessions of IGC, have expressed strong objection. They stand for the “autonomy” of IGC. Others insist the integration of IUGS related activities.

What and who is IGC? Whenever there is talk about “merger”, it usually means the merger of organizations. IUGS is, of no doubt, a well-defined organization, but IGC is not. The Congress is an event hosted by selected member countries in turn according to the tradition established during the long history of IGC. The IGC does not have any permanent office. In order to maintain some degree of continuity, an IGC Steering Committee was established. The

IGC Steering Committee was in essence nothing else but the joint meeting of representatives of Sessions of IGC and IUGS. After the Florence Congress, the IGC Steering Committee became the IGC Committee of IUGS. It unlikely means the integration of IGC with IUGS.

Hongren then pointed out that the real organization behind IGC is nothing else but the hosting country of IGC, or the Local Organizing Committee (LOC) of IGC. As the representative of the world geo-scientific community, the responsibility of IUGS is mainly to ensure the IGC Session to be in accord with the aims of the union. However, the IUGS does not have the resources to hold a Session of IGC. It has to entrust a selected partner country, which bears the financial cost and organizes all the human power and facilities for the Sessions. Consequently, the real host and supporting organization of IGC Sessions are the host countries or LOC. The relationship between IUGS and LOC should be the relationship between the international geo-scientific community and the host country or the LOC. The latter should deserve an appropriate degree of respect and autonomy.

The IGC Committee cannot represent IGC either. The predecessor of IGCC was the IGC Steering Committee; Zhang Hongren was a member of it for 12 years. It consisted of the representatives of previous and immediate next sessions of IUGS plus two representatives from IUGS. It was not a real organization but a joint meeting of the representatives of those organizations. It was a very loose “organization” and met once every two years. After the merger of the IGC with IUGS councils, the IGC Steering Committee was renamed as the IGCC of IUGS. The members of the IGCC are essentially unchanged, except for the addition of the Treasurer of IUGS. So, it is still the joint meeting of IUGS and LOC. It is the place of consultation between IUGS and LOC and by no means equals to IGC.

If the position of IGC Committee (the joint meeting of representatives of IUGS and LOC) is put under the Executive Committee of IUGS, it means the LOC is also under the Executive Committee of IUGS. The LOC would be merged or integrated with IUGS. This is unnecessary and impossible.

Following, some conclusion are:

- 1) IUGS must recognize that IGC is the Forum of IUGS.
- 2) It is not crucial to have integrated or separate Statutes and Bylaws, if they correctly reflect the basic principle recognized by international geo-scientific community.
- 3) The LOC must follow the general principle of IUGS and the MOU signed between them. However, IUGS should pay enough respect and leave enough autonomy for LOC, which provide almost all the resources for a given session of Congress.

In response, Ian Lambert accepted the following principles:

- 1) The IGC needs to be recognized as the Forum of the IUGS, which is the Union of the world geological community.
- 2) The LOC is the real organization behind the IGC and the general relationships between the IUGS and the LOC should be set out in an MOU.
- 3) The main purposes of IGC Committee (of IUGS) meetings should be for structured consultation between the IUGS and the LOC (to complement the ongoing *ad hoc* communications), and to prepare (on behalf of IUGS) advice for Council on bids for future IGCs.

Peter Bobrowsky then elaborated on procedures. During the Council Meeting, countries present their bids for the 35<sup>th</sup> IGC (2016). In Oslo, a new location will be selected. Morocco, India and South Africa will make formal presentations and should have booths and brochures. He stressed that it was important for Morocco and other candidates to review the 33<sup>rd</sup> and 34<sup>th</sup> IGC brochures. The candidates should deal directly with the IGCC and not IUGS and the IGC. IUGS would not interfere with bidders. Bobrowsky also suggested Morocco and South Africa discuss the benefits and problems of making a joint bid: their combined efforts could make for a stronger case.

Bobrowsky continued that traditionally, only a recommendation on the venue can be made at the IGC: the IGCC does the checking of the conditions of the bid (e.g., informal site visits, etc.). Arne Bjørlykke pointed out that there was no site visit following Australia's winning bid, and that only under extraordinary conditions would the IGCC make a decision. Their role is to make recommendations and they need to see potential venues to make informed decisions. Ian Lambert thought a clear indication on the conditions of the winning bid would be useful: e.g., suitability of venue, sponsorship, and clear guidelines on vetting procedures. Ezzoura Errami arranged a short visit to the Moroccan candidate venue for the EC and IGCC.

Jean-Paul Cadet and Zhang Hongren felt it necessary not to present too complicated a picture: the revised Statutes and Byelaws are an attempt to address this issue. Bjørlykke envisioned the IGC and IUGS as different, with "geoscience" as the focus of the former, and not a platform solely for the IUGS. Zhang Hongren and Eldridge Moores defined "geology" as "geoscience" and recommended the IUGS be open to the wider aspects of geology.

**Action Item 20**

IUGS President will consult with current IGCC and table report on IGC 33 to the new IGCC (IGC 34).

## 8) INTERNATIONAL COUNCIL FOR SCIENCE (ICSU)

### 8. a. Relations with ICSU

Peter Bobrowsky opened, stating that ICSU was important to IUGS, then reported that an ICSU meeting was re-scheduled to February 2009 so that IUGS Bureau Members could attend. Robert Missotten suggested IUGS write the Chair of the meeting to facilitate action; he also noted that after the last Bureau Meeting, continued dialogue and exchange of letters on how IUGS sees ICSU participation was encouraged. He felt there was a need for increased interaction. Eldridge Moores and Jean-Paul Cadet suggested increasing the visibility of IUGS within ICSU. Bobrowsky also commented on the switch from US Dollars to Euros and IUGS's response: pro-rating and adjusted payment since there is no high-level IUGS representation and no benefit to paying higher fees.

Bobrowsky complimented Eduardo de Mulder and Uri Shamir for working together. There could be no combined meetings until a mechanism was in place to coordinate organization. Godfrey Nowlan wondered if there had been any thought given to special "Co-op Meetings" between Congress years? Robert Missotten noted that there would be an IYPE Conference to which IUGS could invite the other GeoUnions, and suggested exploring this possibility with de Mulder.

### 8. b. ICSU Committees and IUGS representation

Anne Liinamaa-Dehls noted that there were some problems with representatives reporting to the IUGS.

#### **Action Item 6**

Secretary General will write a letter to IUGS Representatives on ICSU Committees regarding problems of reporting to IUGS.

### 8. c. ICSU Grant Programme

Peter Bobrowsky reviewed the funding history of the ICSU Grant Programme, noting the revised grant is for Euro 30,000. Only six of the new proposals are supported by multiple unions:

<b>ICSU Body or Initiative</b>
Scientific Committee on Antarctic Research (SCAR)
Federation of Astronomical and Geophysical Data Analysis Services (FAGS)
COMmittee on DATA for Science and Technology (CODATA)
Committee on Disaster Reduction (CDR)
Scientific Committee On Problems of the Environment (SCOPE)
Scientific Committee on Frequency Allocations for Radio Astronomy and Space

Science (IUCAF)
International Geosphere-Biosphere Programme (IGBP)
Scientific Committee on Oceanic Research (SCOR)
Scientific Committee On Solar-Terrestrial Physics (SCOSTEP)
Committee On SPace and Research (COSPAR)
Panel on World Data Centres (Geophysical, Solar and Environmental) (WDC)
World Climate Research Programme (WCRP)
An Integrated Programme of Biodiversity Science (DIVERSITAS)
International Human Dimensions Programme on Global Environmental Change (IHDP)
Global Climate Observing System (GCOS)
Global Ocean Observing System (GOOS)
Global Terrestrial Observing System (GTOS)
ICSU/TWAS/UNESCO Visiting Scientist Programme
International Network for the Availability of Scientific Publications (INASP)
Integrated Global Observing Strtegy (IGOS)

<b>Project Title</b>
<p><b><u>RECONSTRUCTING HIGH-RESOLUTION LACUSTRINE AND MARINE PALEOENVIRONMENT RECORDS (LAST 20 KA): LINKAGES BETWEEN INDIAN OCEAN MONSOONS AND NORTH ATLANTIC OSCILLATIONS</u></b></p> <p>Stockholm University (J. Routh, coordinator <a href="mailto:joyanto.routh@geo.su.se">joyanto.routh@geo.su.se</a>), ETH-Zurich, Poznan Radiocarbon Laboratory-Adam Mickiewicz University, University of Michigan, Indian Institute of Technology</p>
<p><b><u>MOUNTAIN-BUILDING PROCESSES AND CLIMATE CHANGE: THE ATACAMA DESERT (NORTHERN CHILE)</u></b></p> <p>Gian Battista Vai and William Cavazza <a href="mailto:william.cavazza@unibo.it">william.cavazza@unibo.it</a> IUGS National Committee of Italy, with the endorsement of the INQUA and IUGG National Committees (in cooperation with the Univ. of Arizona, the Univ. of Antofagasta and ETH-Zurich)</p>
<p><b><u>PROVINCE ORE MINERALIZATION - PETROLOGICAL, STRUCTURAL AND LITOLOGICAL FACORSIRS ITS FORMATION (GRETER CAUCSUS)</u></b></p> <p>Vice president of the Georgian Geologist National Committee, Professor A. V. Okrostsvaridze <a href="mailto:okrostsvari@hotmail.com">okrostsvari@hotmail.com</a></p>
<p><b><u>GEOLOGICAL PROOF OF THE MYTHICAL GOLD CONTAINING FILDS IN SVANETI AND “GEOTOUR-GOLDEN FLEECE” PREPARATION</u></b></p> <p>Vice president of the Georgian Geologist National Committee , Professor A. V. Okrostsvaridze <a href="mailto:okrostsvari@hotmail.com">okrostsvari@hotmail.com</a></p>
<p><b><u>AN ECOLOGICALLY SUSTAINABLE MANAGEMENT MODEL FOR THE GODAVARI – KRISHNA BASINS OF ANDHRA PRADESH, INDIA</u></b></p> <p>Prof. U. Aswathanarayana, Hon. Director, Mahadevan International Centre for Water Resources <a href="mailto:uaswathanarayana@yahoo.com">uaswathanarayana@yahoo.com</a>; (ii) Dr.(Ms.) T. Vijayalakshmi, Asst. Prof., Centre for Environment, Jawaharlal Nehru Technological University. Submitted via Prof. Harsh Gupta</p>
<p><b><u>MAPPING GEOUNIONS TO THE ICSU FRAMEWORK FOR SUSTAINABLE HEALTH AND WELL-BEING</u></b></p> <p>Supporting Applicant(s) (Organization(s): IUGS, IUSS, IGU, IUGG, ICSU-ROA, ICSU-SHWB, GEC-Human Health Dr. Stanley Morain: <a href="mailto:smorain@edac.unm.edu">smorain@edac.unm.edu</a></p>

## 9) IUGS POLICY AND STRATEGY MATTERS

### 9. a. IUGS Statutes and Byelaws

Eldridge Moores began by recounting a brief history of the streamlining of the Statutes and Byelaws. The Task Group came up with a draft for the Punta Arenas EC meeting following the request by the IGCC to separate documents for the IGC and IUGS. Two separate documents were presented and approved in principle at the Nara EC meeting. Following this, the Task Group has been working to present these as a single document again. Paragraphs 35 and 38 were revised to make them more explicit and Stature 81, dealing with financial matters, has been revised to reflect separate financial responsibilities of IUGS and the IGC to placate the IGCC and Antonio Brambati.

Arne Bjørlykke expressed concern over some of the wording used in the document, and with Eldridge Moores discussed the legal standing of the IUGS and IGC. IUGS is a not-for-profit organization, whereas the IGC is profit oriented. Moores noted that is now stated that IGC matters are the responsibility of the IGCC and not the concern of the IUGS EC.

Moores asked for EC approval of the integrated set (modified from previous comments), with submission for final approval by email before the Oslo meeting. Zhang Hongren asked for the EC to approve the latest version before going to Council for approval. Moores thought that EC should accept the revisions and approve submission. Ian Lambert wondered whether the IGCC should prepare a separate version and noted some inconsistencies in wording. Robert Missotten also expressed some concern, and wondered if there was a mechanism in place for email voting of an integrated document. Bjørlykke did not like the idea of electronic voting and stressed that any changes should be in place three months before the IGC, and recommended some limits on proposals.

#### **Motion**

Sylvi Haldorsen motioned that, in accordance with current IUGS and IGC Statutes and Byelaws, all the revised documents by the Statutes and Byelaws Task Group, together with proposed modifications by Council or members of the IUGS EC (submitted in a timely manner – before May 5<sup>th</sup>) should be presented to Council for approval. These approved changes would then be voted on at the Council Meeting. Eldridge Moores seconded the motion.

Motion: **unanimously approved**

### 9. b. Priorities of IUGS

Zhang Hongren referred the EC and observers to the opening remarks of his President's Report. In this session, Hongren began by cautioning that UNESCO has given warning that there will be substantial budget cuts and that limited resources should be strategically distributed. For example focussing on scientific activities of the IGCP and suspending grant programs, he suggested that a task for the new EC would be to continue to investigate the key priorities for IUGS (e.g., Energy and Resources).

Eldridge Moores noted that the IUGS recently closed the CFF despite the fact that fossil fuels are a critical global issue. He recommended that a new Commission on Sustainable



Development be established to meet our own needs without compromising the ability of future generations to function (see also Section 5.c.7). Sylvi Haldorsen thought this should be a proclamation since it was very important and more of a strategy of IUGS.

Peter Bobrowsky remarked that the most successful Commission have been “bottom-up”; those that have failed did so because their Commission Members were inactive. This suggests composition is critical. Bobrowsky thought that there was room for 2 or 3 new commissions and recommended putting out a request to the Earth Science communities to work on devising their scope. He also pointed out that Commission members come at their own expense, and with money to fund science activities.

Zhang Hongren resumed by stating that the IUGS was recognized by the world geoscience community, but that it was limited by a lack of funding. IUGS’s strength is in organization and an emphasis should be placed on this aspect. Through its better use of limited resources, IUGS should benefit human-kind.

Arne Bjørlykke saw this as a good mission statement, then went on to warn that to survive, IUGS needs to reach outside of the geosciences and join with other ICSU members. EC meetings should be used to increase IUGS visibility and communication.

Jean-Paul Cadet commented that despite limited funding, results were profound. However, a clear message is required to secure good funding: if IUGS has good ideas for Commissions, then funds will come. The challenge was to have inter-functioning and cross-fertilization between IUGS Commissions. Arne Bjørlykke suggested IUGS cooperate with other Geo Unions. Bobrowsky indicated that the 44 Affiliates should have an active role in structuring the future. Godfrey Nowlan thought that the ~6000 delegates at the next IGC should also be canvassed for their responses.

Nowlan also felt that Outreach should be a priority of IUGS, suggesting organizations that meet the Union outreach aims could display its logo without too much cost. This would generate locally produced material with linkages to IUGS. Alberto Riccardi also felt that IUGS should be more active in Outreach.

### **9. c. Financial support for access to Bureau positions**

Antonio Brambati deferred discussion until Agenda Item 11 (Requests for Funding and Budgets for 2008).

### **9. d. Strategic position on collaboration between IGC, IUGS and IUGS Affiliated Bodies**

Sylvi Haldorsen reported on the findings of the Nara Task Group on the relation between IUGS-IGC Affiliates. TG Members were: Sylvi Haldorsen (Chair), Eldridge Moores (IUGS), Gabi Schneider (IUGS), Neil Roberts (IGC), Alik Ismail-Zadeh (IUGG), Andrew Skinner (IAH). Additional discussions with Jerry Brown (IPA) and Lopo Vasconcelos (GSaf) also helped. A more complete report from the work was discussed at the IUGS Bureau meeting in Italy in September.

A choice of core themes of great societal importance to play an important role from one IGC to the next should be ready before Oslo, so that we can start the work already from 2008 (prepared by Neil Williams and Sylvi Haldorsen). The preference is to use the list of IYPE

themes. The question is whether to make all IYPE themes core themes or to ask the Council to nominate some of the themes as core themes for the inter-congress period 2008 to 2012. A letter explaining the idea behind core themes, the list of proposed themes, and the candidates for the science committee have to be sent to the Council members well before the Congress. The core themes should be given extra money, but this has to be discussed by the new Executive Committee in collaboration with the LOCs for the Oslo and Brisbane IGCs.

A Science Committee has to be appointed to follow up the themes and should report to the IGC organising committee and the IUGS Executive Committee. Care will be needed to make sure appropriate candidates are put forward in Oslo. The committee should consist of members from the IUGS bodies, the affiliated unions and representatives from the local IGC science committees (Oslo and Brisbane). One possibility is to ask the IUGS bodies and affiliates to nominate candidates. The main tasks of the Science Committee are to make sure that the core themes are highlighted and prioritized during 2008-2012 and that the results play a central role in Brisbane in 2012, and:

- Follow up the activity related to the core themes at all levels
- Propose new task groups when needed
- Organise workshops
- In cooperation with the IUGS webmaster publish current news from the work on the web
- Plan the presentation of the results in Brisbane.
- Plan the publication of the results
- Contact media to highlight the work before and during the Brisbane Congress

The science committee should work in close contact with the Congress Programme Committee. It would maybe useful if at least the leader of the Science Committee is also a member of the Congress Programme Committee (or vice versa). To carry out the work, the existing IUGS bodies and the affiliates should be used. There should be an invitation to integrated work related to the core themes into the planned and ongoing activities in the commissions. For some commissions are at the present not very active this initiative might be a way of reactivating them.

Eldridge Moores thought this was all a good idea, but cautioned that it had to be done delicately. He and Mikhail Fedonkin saw the need to attract specialists and shared a vision of actively connected officers. Zhang Hongren reminded the EC that the local organizing committees are independent of IUGS, which could only make recommendations. Moores saw the need of a Task Group to collect impressions of the science highlights from IGC; and to suggest possible future directions for IUGS. Sylvi Haldorsen and Godfrey Nowlan wanted to bring IYPE ideas through into the next Congress period.

### **Action Item 3**

Regarding relationship between IUGS and IGC Affiliates: form a joint IUGS-IGCC Science Committee to work with incoming and outgoing IGC Committees to define and prioritize themes for Affiliates.

### **9. d. 1 Database**

There should be a central database for geological sciences on the IUGS website that could contain a large number of searchable scientific key words. When a key word is chosen, links to relevant affiliates and IUGS sub-bodies should come up on the screen. The IUGS website

could in this way serve as a central portal for all IUGS affiliates and IUGS bodies. The work could be organised in the following way:

IUGS defines a list of broad and generally accepted keywords in geology. The IUGS bodies and affiliates are asked to decide which of these keywords are relevant for their own activities; if needed they may propose some additional keywords. The complete list of keywords should be grouped under broader headings (e.g. “minerals” covers both “economical minerals” and more basic “clay mineralogy”).

#### **9. d. 2 Young Earth Scientist Congress**

Zhang Hongren and Antonio Brambati discussed the letter from Iuca Micucci announcing the first World Young Earth Scientists (Y.E.S.) Congress initiative for Earth Scientists in 35 years. The aim of the initiative is to encourage dialog between system-earth scientists and professionals of different geographical contexts and generate the basis for future long-term cooperation. Two key actions discussed were to make Earth Science knowledge available for Society and to promote the education and commitment of young generations of earth-system scientists. The YES Congress will create a network of young geo-scientists- young leaders - policy makers that can contribute to lead Earth Science community and decision makers to a long term process of interactions, creating the basis of a long term contribution of Earth Science for Society.

Eldridge Moores thought this was a good initiative, stressing the need to have geologists in all spheres of influence. The IUGG covers the expenses of all the Officers. Students should be encouraged to become geoscientists. IUGS could address the drop-off in field instruction at university. Brambati agreed, adding that most new geologists are classroom-bound, fixed to computers and focus on numerical data. Godfrey Nowlan commented on some of the findings of the Youth Committee for Canadian IYPE. Young geoscientists operate in a different manner: they are very web-savvy and demand digital display of data.

#### **Action Item 10**

IUGS (Secretary General) will write to the Young Earth Scientists organization acknowledging their efforts.

## **10) INTERNATIONAL YEAR OF PLANET EARTH**

### **10. a. Organization and Opening Ceremony of IYPE**

Sylvi Haldorsen opened by congratulating IYPE on their Global Launch, February 12-13, 2008 in Paris, hosted by UNESCO. Eduardo de Mulder proceeded to report on activities of The Year, including opening events from 2007-2008 in London, Tokyo, India, Brazil, Portugal and other events around the world. The UN Year is 2008 although the Secretariat will function through to mid-2010. The UNESCO Director General, along with Ministers from China, France and Italy attended the Global Launch. A video message by (the now late) Arthur C. Clarke closed the event. After working for some 15 years on improving the visibility of geosciences, de Mulder senses a wholesale increase in the level of awareness within the global community.

### **10. b. Science and Outreach**

Increasingly, the focus of National Committees for The Year has moved from Science to Outreach, noted de Mulder. This scaling back on science was forced because funding levels fell short. Nevertheless, prominent scientific efforts include OneGeology and IGC. There will be an IYPE supplement in Nature and there will be 8 textbooks and a lecture series. Science Leaders were enthusiastic and there is activity on some of the themes.

Outreach includes balloon launches, student contests, geo-transportation, exhibitions, lay books, Geopark excursions, rock competitions (“national rocks”), Geohazards International shaking trucks, DVDs, stamps and coins. The IYPE Website is also regularly revised and updated. Jean-Paul Cadet was referred to the Website for the structure of the IYPE Board. IYPE is also supporting Earth Learning Ideas.com which posts online every week, information on a new geoscience issue. Haldorsen added that there were two sides to outreach: messages to politicians and press; and messages to children’s organizations, schools, etc.

### **10. c. National Committees**

Sylvi Haldorsen began by commenting that The Year had generated a lot of activities around the world, with many events and products in preparation or available now that will have a lasting impact. It was good that IUGS has been involved in the venture. She then asked available representatives of IYPE National Committees to make short presentations. A complete list of all the initiatives at the National Level would hopefully be available at the IYPE Closing Event in 2009.

Ian Lambert began, stating that Australia had a modest launch. The National Committee meets only twice a year. Contributions include the Royal Mint issuing a commemorative coin set, three chapters in an up-coming text book, conferences, geo-tourism events, a National Science Week, Earth Week, singing competition, and IYPE themes in a resource textbook for teachers. In addition, \$10 millions in research projects are underway on IYPE-related themes (but not necessarily connected with The Year).

Godfrey Nowlan reported for Canada, whose focus is on Outreach and making the geoscience community aware of IYPE. Brochures have been prepared for science centres with the Canadian themes of W.H.E.R.E. (T.E.R.R.E.). An ineffective TV commercial was run in

parallel to a modest, CBC production featuring respected Canadian geoscientists and narrated by David Suzuki. A 32 item science fact sheet (the basis for a later competition) has been prepared. In addition, a Northern BC Highway Geology map is on sale, and a popular book (Geology and Earth History: Health and Wealth) is in preparation. Out of this, some 200-250 diagrams will be generated for earth science educators (for example, it is a challenge for K11-14 students to describe where materials in their homes and schools come from). There is also the Geotime Trail – a 4.5 km trail spanning the 4.5 GA of Planet Earth in southern Ontario. A legacy website for IYPE has been built. Other projects referred to by Nowlan include an initiative by National Parks to better explain the geology of key sites and regions. Much of Canada's funding has come from the Oil and Gas Industry.

Mikhail Fedonkin briefly described the activities of the Russian Academy of Science, noting they were behind schedule. People are developing activities, but there is nothing formal or centralized.

Ryo Matsumoto commented on the progress of Japan's National Committee, including the opening of IYPE in Tokyo and GeoPark activities. Some 15 government-supported research proposals have been received. Geology Day was planned for May 10<sup>th</sup>. For outreach town hall meetings and symposia are planned. A seismic truck will tour the countryside, supported by TV crews. Fund-raising activities are expected to raise \$500,000. Geoscientists in Japan are also looking at interaction with other GeoUnions.

Martha Mantovani reported that in Brazil, the NC was active, with meetings in 2007 and 2008. Science centres are emphasizing IYPE, and there will be a National Week in 2008. Teaching materials are also being prepared. Eduardo de Mulder added that IYPE brochures and other materials have been translated into Portuguese.

Eldridge Moores followed with the US efforts which got off to a late start. IYPE has good visibility with GSA. Some 5-6 GeoParks are being developed. A Critical Issues Group is involved, with NASA, USGS, and a number of industries and associations participating bodies. Moores was not aware of any legacy items in preparation.

Sylvi Haldorsen pointed out that Norway's chief contribution is the up-coming IGC in Oslo. The NGU also supports the Secretariat. The Geological Society of Norway is active and has identified one large research project for each IYPE Theme. The Amateur Geological Organization is also active, indicating that enthusiasm is at "ground-level".

Zhang Hongren reported that although the National Committee in China is established, the up-coming election will likely result in its re-organization. After this, there will be an official launch. The 10 brochures are being translated. Eduardo de Mulder offered to take the translated text so that the Secretariat and Design Company can build new documents. IYPE needs to maintain control of publishing and preparation.

Alberto Riccardi gave an overview of Argentina's contributions, noting that the National Committee was organized in 2006 and that the Chair is also the Head of the IUGS NC, so activities are centralized. The IYPE launch event was held in Buenos Aires in 2007. Many of the 10 IYPE Themes were covered in the journal Science Today; links to websites and other information are also available. In 2008, the Argentina Geological Congress will be devoted to The Year. A textbook for the general public on geological sites in Argentina is 80% complete

and scheduled for release later in 2008. Outreach to schools, including scientists in the classroom, is on-going.

France has active National and Regional Committees, reported Jean-Paul Cadet. Fund-raising has been a success, raising 500,000 Euros. Some 300 initiatives, expositions, festivals, conferences and other events are underway or are planned over the 2007-2009 Triennium. The NC was active in the Global Launch in Paris. Cadet also commented on the legacy work, in particular GeoPark initiatives and preparations for the closing event. Eduardo de Mulder complimented France on their cooperation.

Antonio Brambati reported that in Italy, the launch of IYPE was to take place in April, 2008. The level of government support was around 750,000 Euros. The Youth Geoscience Congress will also be held in Italy.

Ezzoura Errami noted limited activity in Morocco, although the Association of African Women Geologists is collaborating with UNESCO. Significantly, there has been some individual action and National Outreach related to the 10 IYPE Themes, e.g., an Artists' Competition. Eduardo de Mulder also mentioned a MoU with the University of Fez, but added there were some communication difficulties. It will be a task to bring together the local activities over the coming years.

#### **10. d. Annual Report & Financial statement 2009, Budget 2009 and Fund-raising Strategy**

Eduardo de Mulder moved on to a brief update on Finances, observing that IYPE was a Not-for-Profit Organization, with a 25 Member Board and Secretariat at the NGU, Norway. Fund-raising expectations are a short of initial projection, with most coming from governmental sources. The ambition is to raise \$20 million. Peak expenses occurred in late 2007 and in 2008 because of global launch events. A future major cost will be at the end of 2008; also, winding-up events will incur some costs. Eldridge Moores suggested de Mulder talk to Robert Missotten regarding IYPE and IGCP co-operation and funding issues. Ryo Matsumoto added that IGCP project websites could carry the IYPE logo to build a legacy.

#### **Action Item 7**

A letter will be sent from UNESCO and IUGS proposing IYPE Secretariat to allocate US\$50,000 to IGCP (to buy a share on the IGCP); the letter to explain how this would benefit both IYPE and IGCP.

#### **10. f. Events in 2008 and IUGS involvement**

Eduardo de Mulder, Eldridge Moores, Mikhail Fedonkin and Godfrey Nowlan discussed the efforts of IYPE in 2008, including: 1) fundraising, which is lacking at the international level; 2) broadening the scope beyond geoscience groups (e.g., Boy Scouts and Girl Guides of America); 3) consolidating an international basis; 4) strengthening vertical communication; 5) Identifying legacy items (text books, landmark papers, etc.) for 2008 and beyond. Zhang Hongren, Eduardo de Mulder and Peter Bobrowsky envisioned a **Decade of Planet Earth (2010-2020)**. Bobrowsky then asked de Mulder what was still required from IUGS; there was a need for positive input of ideas and suggestions. He saw IYPE as a tool to highlight geoscience and encouraged the EC to share ideas in writing with IYPE (e.g., other legacy items).

Because outreach events are beneficial, de Mulder also recommended that Heads of State or their Ministers be invited or involved in Opening and Closing Events (although IYPE cannot financially support their presence); by involving politicians, you have their commitments.

## **11) REQUESTS FOR FUNDING AND BUDGETS FOR 2008**

This session was closed to Observers. Antonio Brambati first reviewed IUGS income and expenses in 2007 and for 2008. Eldridge Moores recommended that the fluctuating value of the US\$ and Euro should be used to the IUGS and Members' advantage. Jean-Paul Cadet congratulated Brambati on managing the finances from 2004-2008. Brambati then moved onto discuss the situation of Active (A) and Inactive (I) Members in 2007-2008. Anne Liinamaa-Dehls cautioned that the reported figures in the closed session might increase if the offer of the Royal Society is accepted. Antonio Brambati reviewed the allotments in 2007 and 2008 allotments.

Zhang Hongren motioned the EC to accept the budget.

Motion: **unanimously approved**

## **12) UPDATE**

### **12. a. Annual Report 2006 and 2007**

David Huntley reported that the 2006 Annual Report was circulated for review in October and posted on the IUGS Website before the end of 2007. Work on the 2007 Annual Report began in February 2008 and a first draft was circulated to EC members prior to the meeting in Marrakech. This edition will be a PRINTED copy as well as being available as a WEB DOCUMENT. The copy circulated is the "core text" - that is essential information that remains year to year. Some areas are highlighted because they will be revised following the EC meeting. At the EC meeting, members were encouraged to consider what should be included, changed or removed. Depending on the extent of revision, hopefully, a finished version will be ready to go to press before Oslo.

### **12. b. IUGS Brochure and Flyers**

Anne Liinamaa-Dehls announced that some 2000 copies of new brochures had been run-off; unfortunately a few IUGS members were not happy with some of the changes. Copies have been placed aside for the new EC to review.

#### **Action Item 16**

Secretary General will write a letter to the Permanent Secretariat to explain that EC did not request revision to the IUGS Brochure.

### **12. c. IUGS Exhibition Stand**

Anne Liinamaa-Dehls reported that exhibits were limited in the EGU (Vienna) and AGU (San Francisco) in 2007. There will be a shared UNESCO, IUGS and CGMW shared stand during Congress. IUGS has 9m<sup>2</sup> of space. Episodes and Commissions will be invited to contribute material.

#### **Action Item 17**

Peter Bobrowsky, Sylvi Haldorsen, Godfrey Nowlan and David Huntley will form a Task Group to review display IUGS materials provided by the Permanent Secretariat for the IGC.

#### **Action Item 18**

Permanent Secretariat will send EC image links to the Norwegian printers.



## **12. d. IUGS Exposure and Advertising Products**

New Products included golf shirt and Geoart greeting cards. In early April 2007, Bobrowsky contacted Huntley regarding of creating and printing a series of 10 Geoart cards with IUGS logo and website information. This outreach initiative aims to promote geoscience (landscapes and concepts) through works of art at the same time as promoting the IUGS.

## **13) FREE DISCUSSION**

With regard to relationships with UNESCO, Peter Bobrowsky felt that IGCP needed to formally develop Hazards and Hydrology groups. Antonio Brambati suggested waiting until the next UNESCO re-organization is complete; this could be an action for the next EC.

Free discussion focused on the up-coming IGC. On August 6<sup>th</sup>, 2008 there will be only a few hours to cover the reports of the IUGS President, Secretary General and Treasurer and voting for new members. IGC voting will also take place the first day. EC members wondered if it was possible to have IUGS and IGC voting on separate days. Reports of out-going EC should be kept short with only essential information given. Perhaps 15 minutes per talk with time allotted for questions. At Florence, it was helpful to have other EC members speak on specific topics.

The President's Report should focus on the highlights only: what has been achieved over the last four years (since the last IGC), highlighting positive actions. There should be some overarching statement on recent developments in the Earth Sciences leading into what the IUGS has achieved over the last 4 years.

- Increased societal awareness of the Earth Sciences
- Revision of the IGCP – changes in science topics and direction
- Collaboration between IGC and IUGS
- International Year of Planet Earth
- Byelaws and Statutes
- Publications with GSL
- Episodes and improvements in communications
- Medical Geology
- GeoHeritage
- Policy and Strategy; comparing with Mid-Term Vision

The report should also provide some statement on the future challenges in Earth Sciences for the new EC, emphasizing building on the legacy of past Executive Committees and being broad in perspective.

The Secretary General's Report should include a checklist of the IUGS Mid-Term Vision and address the State of the Art in Geosciences:

- Changes and successes of IUGS Commissions; a few lines on each, including those terminated
- Relationship with UNESCO
- ICSU and maturation of GeoUnions
- Collaboration with IUPAC, IUGG, IUHPS and IUCN

- Finalization of Statutes and Byelaws
- Applications for Affiliation
- Medical Geology
- Increased Membership of Affiliates
- Adhering Organizations (National Committees)
- GeoParks and GeoHeritage
- Resolution of issues with ICS
- Progress with Task Groups
- Improvements in communication
- GSL
- New Initiatives

The Treasurer's Report should also focus on the financial highlights regarding the administration of science and be positive in outlook. The outgoing Treasurer should emphasize how much money is being passed on to the incoming Treasurer.

- Review of the period 2004-2008
- State of Finances in 2007 and issues with UNESCO support
- Changes in Membership Fees
- Changes in Active and Inactive Adhering Bodies
- Increased Membership of Affiliates
- Upgraded membership
- Comparison of Income over Expenses
- Bank Interest
- Future Finances 2008-2012
- Increasing income

Nominating and Election Procedures: The President should chair this session. Begin with the report of the Nominating Committee. Nominating statistics could be posted on IUGS Website before meeting; showing global distribution of EC through time. Candidates should be prepared to give short vision statements. Presidential Candidate(s) should give a short vision statement

For the election of new officers: start with election of the President, followed by Secretary General, Treasurer, Vice-Presidents and then Councilors. To avoid confusion between voting for IGC and IUGS councils, Candidates for each posting should be made up on separate, colour-coded ballot cards. Voting packages should be handed to Head Delegates, who should sign for these. Only those registered can vote. Contained in this package should be relevant sections from the Statutes and Byelaws. Rules and Regulations can also be projected on the screen to help voters. The Auditing Group: scrutinizers should include EC councilors.

Issues (e.g., Commissions, ICSU) that were raised in brief on Day 1 can be taken up on the second day. Presentations and details should be provided in writing to participants. IYPE will be a specific item on the agenda. Observers (representatives of organizations) can speak

#### **Action Item 19**

Secretary General to send dates of IUGS activities at IGC 33 to participating EC Members

#### **14) VENUES OF THE 59<sup>th</sup> and 60<sup>th</sup> EXECUTIVE COMMITTEE MEETINGS**

Peter Bobrowsky announced that Australia had offered to host the next EC meeting after Oslo (first meeting of the new EC). He recommended that the new EC go to Brisbane as part of a field trip to assess the 34<sup>th</sup> IGC facilities. The venues were 59<sup>th</sup> EC Meeting, Oslo, Norway; 60<sup>th</sup> EC Meeting, Sidney, Australia.

#### **15) OTHER BUSINESS**

Outgoing EC members will be receiving awards at the IGC. The 58<sup>th</sup> EC Meeting closed at 4 pm on March 21<sup>st</sup>, 2008.