

INTERNATIONAL UNION OF GEOLOGICAL SCIENCES

63rd EXECUTIVE COMMITTEE MEETING

FEBRUARY 14-17, 2012

DONOSTIA - SAN SEBASTIAN, SPAIN

DIPUTACION de GIPUZKOA

Plaza Gipuzkoa, De, 001

Official Minutes



Hosted by

Instituto Geologico y Minero de Espana

Meeting Participants

Executive Committee Members

Alberto Riccardi (IUGS President), Peter Bobrowsky (IUGS Secretary General), William Cavazza (IUGS Treasurer), Jacques Charvet (IUGS Vice President), Zhang Hongren (IUGS Past President), Colin Simpson (IUGS Councillor) Ezzoura Errami (IUGS Councillor), Wesley Hill (IUGS Councillor) and Sambat Kumar Tandon (IUGS Councillor)

Observers

Fernando Tornos (IGME), Jon Uriguen (IGME), Patrick Leahy, (IUGS, FC, Statutes C), Antonio Brambatti, (IUGS FC), Attilio (Lio) Boriani (IUGS SPC), Fred Spilhaus (IUGS PC), Mudlappa Jayananda (IUGS PC), Ian Lambert (34th IGC), Luca Demicheli (GS of Italy). Johan Zdenek (IUGS FC), Eduardo de Mulder (PEI)), Jesus' Martinez-Frias (COGE), Sarmond Ahmood (AGA), Stan Finney (ICS), Ian Lambert (34th IGC), Dolores (Lola) Pereira (HSTG), Arnie Bjorlykke (IGCC), Danie Barnardo (South Africa IGC), Ed DeMulder (ESM), Aberra Mogessie (GSAf), Mirka Trajanova (Slovenia NC), Carlos Martinez Navarette, Isabel Rabano (IGME, INHIGEO), Manuel Reguerio (IGME), Asier Hilario Orus (IGME), and Enrique Diaz-Martinez.

Secretariat

Richard Calnan (IUGS Secretariat, U.S. Geological Survey), Nancy Zeigler (Recording, U.S. Geological Survey)

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1. WELCOMING ADDRESSES

The IUGS President, Alberto Riccardi opened the 63rd IUGS EC Meeting at 9:10 a.m. acknowledging, the host Fernando Tornos, Deputy Director of the Geologic y Minero de Espana, and thanking him for his generous hospitality. The Deputy Director expressed a welcome address to the members of the IUGS. Jon Urriguen, Diputado de Innovacion de Gipuzkoa also provided welcoming remarks on behalf of his institution.

2. APPROVAL OF AGENDA

Alberto Riccardi moved that Agenda be approved: Motion approved.

3. MINUTES OF THE 62nd EXECUTIVE COMMITTEE MEETING, 22-25 FEBRUARY 2011, PARIS, FRANCE

3.a. Approval of the Paris Minutes

Alberto Riccardi called for a vote to approve Minutes for the 62nd Executive Committee Meeting: motion approved as circulated.

3.b. Actions arising from the Minutes

62nd Executive Committee Meeting in Paris, France, 22-25 February, 2011 -- There are 11 pending action itmes highlighted in yellow: 1, 15, 19, 24, 26, 28, 30, 31, 41, 42, & 54 .

ACTION ITEM #1: The Chair of the Publication Committee (PC) Fred SPILHAUS should organize a physical meeting of the entire committee within the next few months to ensure delivery of outstanding items and obligations. - Pending

ACTION ITEM #2: President Alberto RICCARDI will write to Springer and inform them that they should not use the IUGS logo on their publications without written permission from the IUGS- Completed

ACTION ITEM #3: The Chair of the Publication Committee (PC) Fred SPILHAUS to provide a written recommendation/strategy to the EC regarding the use of the Union logo for various types of publications, and specifically with regard to those that were accepted by other publishers after being rejected by GSL.. Completed

ACTION ITEM #4: IUGS Secretariat to provide pdf copies of all Commission and Task Group reports to Secretary General Peter BOBROWSKY for immediate uploading to the website Completed

ACTION ITEM #5: ICS Chair Stan FINNEY to propose to the IUGS EC a solution regarding the relationship/transition of existing ICS Awards into new IUGS Awards. Completed

ACTION ITEM #6: President Alberto RICCARDI to publish an acknowledgement about Prof. Pinto in relation to INHIGEO for Episodes. Completed

ACTION ITEM #7: Secretariat to obtain ratification from the IUGS EC for the proposed new members to TECTASK and then obtain formal Council approval. Completed

ACTION ITEM #8: Councillor Wesley HILL to determine the exact structure and type of relationship that exists between the IUGS TGGGB and the new Tier 2 UNESCO Geochemical Institute in China. Completed

ACTION ITEM #9: Councillor Wesley HILL to act as IUGS EC official liaison for IUCN related activities and with the Task Group on Geoheritage. Completed

ACTION ITEM #10: Secretary General Peter BOBROWSKY to inform the IUCN that IUGS EC requires that the IUCN acknowledges and responds past evaluation to IUGS reviewers. Completed

ACTION ITEM #11: Councillor Tandon Sampat KUMAR to write the Task Group on Isotopic Geology (TGIG) requesting that they submit a formal request to the IUGS EC to approve any recommendation and change before publishing them. Completed

ACTION ITEM #12: President Albert RICCARDI will approach the GeoUnions encouraging our collective participation in the pending Green Energy Meeting in Rio. Completed

ACTION ITEM #13: All IUGS EC members should recommend potential new members as scientific specialists to the virtual scientific board of IGCP sending details of candidates to the Secretary General before 1 July 2011. Completed

ACTION ITEM #14: All of the IUGS EC to ask their national representatives to provide formal contacts and consider participation in the Task Group on Global Geoscience Workforce (TGGGW). Completed

ACTION ITEM #15: The Task Group on Global Geoscience Workforce Chair Chris KEANE to develop and promote a simple website for this activity. Pending

ACTION ITEM #16: Secretary General Peter BOBROWSKY to add the successful ICSU grants to the IUGS website. Completed

ACTION ITEM #17: Episodes Editor MUDLAPPA Jayananda to include the Impact Factor prominently in the future issues of the journal Episodes. Completed

ACTION ITEM #18: President Alberto RICCARDI to send a letter to all members, affiliates, and others inviting them to contribute to the journal Episodes. Completed

ACTION ITEM # 19: Episodes Editor MUDLAPPA Jayananda to link Episodes website to the website of the Geological Society of Africa to promote the journal in Africa. Pending

ACTION ITEM #20: President Alberto RICCARDI to send Wikipedia information to the EC. Completed

ACTION ITEM #21: President Alberto RICCARDI to write letters of thanks and appreciation to all those individuals involved with the 50th Anniversary celebrations. Completed

ACTION ITEM #22: President Alberto RICCARDI to submit an article to Episodes regarding the IUGS 50th Anniversary event. Completed

ACTION ITEM #23: Vice President Jacques CHARVET to provide the contact details of all National Bodies to Secretary General Peter BOBROWSKY for inclusion in the website. Completed

ACTION ITEM #24: Councillor Wesley HILL to obtain and populate a large scale poster display for use by the IUGS in pending conferences. Pending

ACTION ITEM #25: President Alberto RICCARDI to ask the Finance Committee, Strategic Planning Committee and Statutes task group to coordinate the documents on which they are working. Completed

ACTION ITEM #26: Treasurer William CAVAZZA to produce recommendations and a detailed plan on how deal with IUGS international standards for IUGS EC approval. Pending

ACTION ITEM #27: President Alberto RICCARDI to contact AGI, SEPM and EMU and request that they provide a logo and link to the IUGS website. Completed

ACTION ITEM #28: The Chair of the PC Fred SPILHAUS and the Publication Committee should provide

recommendations to the EC regarding the current and potential future publication and distribution strategy of Episodes. **Pending**

ACTION ITEM #29: President Alberto RICCARDI will clarify with the ICSU RO for Asia and Pacific and IUGS liaison OCHIR Gerel problems of communication between them. Completed

ACTION ITEM #30: Chair of the Publication Committee Fred SPILHAUS to develop a special section in the journal EPISODES dealing with national highlights for various countries. **Pending**

ACTION ITEM # 31: Councillor Tandon Sampat KUMAR to look for new member countries. **Pending**

ACTION ITEM #32: Councillor Tandon Sampat KUMAR to request to GSAf President A. MOGESSI to provide list of potential contact names from African inactive and non-member countries. Completed

ACTION ITEM #33: President Alberto RICCARDI to provide a list of potential contact names from Latin America to Councillor Tandon Sampat KUMAR. Completed

ACTION ITEM #34: President Alberto RICCARDI to contact the Geological Society of London to see if they are willing to sponsor African country members to the IUGS. Completed

ACTION ITEM #35: President Alberto RICCARDI to send the contact coordinates for the UNESCO Jakarta office to Councillor Ochir GEREL. Completed

ACTION ITEM #36: IUGS to help to advertise (website, e-Bulletin) UNESCO's (Robert Missotten) position to become vacant this year. Completed

ACTION ITEM #37: President Alberto RICCARDI will assume the role of liaison with the ICSU RO for Latin America and the Caribbean. Completed

ACTION ITEM #38: President Alberto RICCARDI to write a letter of confirmation and response to each individual Adhering Body in response to their annual reports. Completed

ACTION ITEM #39: President Alberto RICCARDI to thank the French NC for the support given to IUGS for the meetings held in Paris during 2010 and 2011. Completed

ACTION ITEM #40: Secretariat to obtain Council ratification for IUGS Affiliate Membership of the Canadian Federation of Earth Sciences. Completed

ACTION ITEM #41: IUGS EC to study the Arab Geological Association proposal for an International Year of Geology. **Pending**

ACTION ITEM #42: IUGS to study a proposal of the Arab Geological Association to eliminate the statutory difference between Active and Inactive countries. **Pending**

ACTION ITEM #43: President Alberto RICCARDI to approach Robert MISSOTTEN to find out what they want to do for engineering geology in IGCP and then the President will approach IAEG to see if they can become involved. Completed

ACTION ITEM #44: Secretariat to circulate the 2009 Annual Report to the IUGS EC in early March. Completed

ACTION ITEM #45: Secretariat to produce the 2010 Annual Report in the next few months. Completed

ACTION ITEM #46: Treasurer William CAVAZZA to submit a formal proposal for a new IUGS award to the IUGS EC. Completed

ACTION ITEM #47: ARC on INHIGEO to be completed (Chair Secretary General Peter BOBROWSKY, Secretary Colin SIMPSON). Completed

ACTION ITEM #48: ARC on COGE to be completed (Chair Councillor Wesley HILL, Secretary Councillor Ezzoura ERRAMI). Completed

ACTION ITEM #49: President Alberto RICCARDI to inform Barry COOPER that the Building Stone proposal has been accepted as an IUGS Task Group. Completed

ACTION ITEM #50: President Alberto RICCARDI to contact Zhao XUN regarding the relationship between the Beijing Geoheritage Office and the new GeoHeritage Task Group. Completed

ACTION ITEM #51: All EC members to submit the names of potential candidates to replace Felix TOTEU in the Nominations Committee. Completed

ACTION ITEM #52: President Alberto RICCARDI to request clarification (statutes, terms of reference, membership list, website, publications, etc.) from GARS with pending approval to fund by IUGS. Completed

ACTION ITEM #53: President Alberto RICCARDI to request a spending plan from COGE with pending approval to fund by IUGS. Completed

ACTION ITEM #54: President Alberto RICCARDI to inform the Chair of GEM Kevin TELMER that he is not pleased with his lack of response and will request a confirmation of proactive change. Pending

ACTION ITEM #55: President Alberto RICCARDI to produce policy guidelines to deal with inactive Affiliated Organizations. Completed

ACTION ITEM #56: The EC to review the content of the brochure IGCP and see if there is something to add and/or change. Completed

ACTION ITEM #57: President Alberto RICCARDI to circulate the proposal by the SGA to the EC. Completed

ACTION ITEM #58: Secretariat to generate a new inventory of brochures and flyers. Completed

ACTION ITEM #59: Councillor Colin SIMPSON to circulate the Geopark TOR to the EC. Completed

ACTION ITEM #60: Vice President Jacques CHARVET to provide the appropriate wording for the proposal to introduce changes in the website in relation to IUGS Adhering Members. Completed

ACTION ITEM #61: Secretariat to find out what is the situation with the IUGS material W. Janoschek has in Austria. Completed

ACTION ITEM #62: President Alberto RICCARDI to request Past-Vice President E. Moores for text of legal advice to IUGS, produced before IUGS formal involvement in the Board of the International Year of Planet Earth (IYPE). Completed

4. ANNUAL ADMINISTRATIVE AFFAIRS

4.a. President's Report

Alberto Riccardi, President

As it was in 2009 and 2010 one of the main points of concern for the IUGS President during 2011 was to improve interaction with IUGS National Committees, as well as with other bodies and organizations working inside and outside of the IUGS to address as efficiently as possible all earth science issues of

relevance to society. Thus, personal letters were sent to all IUGS bodies, including Commissions, Task Groups, National Committees, Affiliate Organizations and Joint Programs, with regard to specific issues of the 2010 reports and stressing the need to develop multilateral cooperation among all these groups, to contribute to the journal Episodes and to provide a logo and link to the IUGS website.

In addition the President:

- a) arranged for the IUGS Adhering Members to be invited to host the IUGS Permanent Secretariat in their country;
- b) published Editorials in Episodes, expressing IUGS solidarity to Japan on the 11 March 2011 earthquake, and with regard to an active participation of Adhering and Affiliate members in IUGS activities;
- c) provided input on the preparation of the final versions of the IUGS 2009 and 2010 Annual Reports and on the Minutes of the 2011 EC Meeting;
- d) wrote to the Governments of Bulgaria and Greece to support geological organizations of those countries in view of possible budgetary cuts;
- e) requested the GSL to sponsor African country members to the IUGS;
- f) provided input with regard to changes in the Statutes to the Statutes Committee, and on the Strategic Plan to the Strategic Planning Committee;
- g) interacted with the IUGS Commission on Stratigraphy on several matters, including those related to approval of the Lutetian and Calabrian GSSP, and sent a message to the dedication ceremony of the Hettangian GSSP in the Alps of western Austria on 20 August 2011;
- h) published in Episodes an acknowledgement about Prof. Pinto in relation to INHIGEO for Episodes;
- i) requested the IUGS Commissions and to the Publications Committee to provide candidates to the IUGS awards;
- j) drafted policy guidelines to deal with inactive Affiliated Organizations; and
- k) informed Springer that they should not use the IUGS logo on their publications without written permission from the IUGS PC.

As a follow-up to the celebration of the IUGS 50th anniversary in Paris on February 2011 the IUGS President sent letters of thanks and appreciation to all those who were present at the event or sent their congratulations, arranged letters and anniversary medals to be sent to past EC members, published an article in Episodes stressing the importance of the IUGS 50th Anniversary and the celebration event. A message on the IUGS 50th Anniversary was also published by invitation of the Editor in *Geologica Carpathica*.

In relation to the International Geological Congress Committee (IGCC) the IUGS President co-organized: 1) bid process for the 36th IGC in 2020; and 2) a meeting of the International Geological Congress Committee (IGCC) in Cape Town on November 7 - 8, 2011. Brisbane, Australia, on 24-25 June, 2010. The Agenda included, among other items, the status of 34 IGC (Brisbane, 2012) and 35th (Cape Town, 2016) preparations, consideration of bids received for the 36 IGC (2020), and a draft version of the revised Statutes of IGC. In relation with the Statutes the IUGS President proposed, before and after the meeting, a series of changes to the new versions proposed by the Statutes Task Group. The IUGS President was also involved in preparing IUGS participation in the 34th IGC (Brisbane, 2012).

With regard to ICSU the IUGS President participated in: a) ICSU 30th General Assembly (ICSU GA) and its preparation, held in Rome on 26-30 September 2011, where a number of important decisions were adopted among them the election of new Officers of the ICSU Executive Board, approval of the outline budgets for 2013-2015, and approval of weighted voting on financial issues. During the GA the IUGS President presented a short oral poster on IUGS activities; b) Nomination of J.-P. Cadet for the Committee on Scientific Planning and Review (CSPR); c) Participation in the Sixth Electronic General Assembly on ICSU's accounts; d) Joint nomination with the GeoUnions cluster of a candidate for ICSU Executive Board; e) request to nominate candidates for the Committee on Freedom and Responsibility in the conduct of Sciences (CFRS); f) Distribution of ICSU's call for ICSU Grants Programme 2012 to IUGS Adhering and Affiliate members and IUGS bodies; g) call to IUGS Adhering and Affiliate members and other IUGS bodies for applications to ICSU Grants Programme 2012; h) acted as liaison with the ICSU

RO for Latin America and the Caribbean.

In relation to ICSU's GeoUnions the IUGS President participated in: a) a one day meeting of the GeoUnions on September 25, 2011 in Rome, Italy; b) requesting to the GeoUnions to consider a collective participation in the United Nations Conference on Sustainable Development (Rio+20); c) actions directed to provide IUGS support to the International Year of Global Understanding (IYGU) initiated by the International Geographical Union (IGU); d) discussions related to the IUGS-IUPAC Task Group on Isotopic Geology paper on "IUPAC-IUGS common definition and convention on the use of the year as a derived unit of time", and published in "Episodes" one comment on procedural matters, and an Editorial with the aim to clarify IUGS activities on geological standards and conventions. In addition IUGS President was kindly represented by IUGS Councillor Colin Simpson at the International Union of Geodesy and Geophysics (IUGG) Council Meeting (Melbourne Australia, 27 June - 2 July 2011).

With regard to the International Year of Planet Earth (IYPE), the IUGS President was involved in different actions directed to compile complete information and legal advice to fulfill the legal termination of the IYPE.

With regard to UNESCO, a variety of meetings were held in February 2011 with several officers of the Division of Ecological and Earth Sciences and the Natural Sciences Sector. Main goals of these meetings were to reinforce existing joint initiatives, such as the International Geosciences Program (IGCP), the Geological Applications of Remote Sensing (GARS), the Geoparks initiative, and to promote coordination of activities in relation to UNESCO's Earth Sciences Education Initiative in Africa. All these matters were pursued throughout the year, especially with regard to the IGCP 40th Anniversary and the book being prepared for the occasion. In addition IUGS President acted as liaison with the UNESCO RO for Latin America and the Caribbean, and supported actively the organization of a Conference on "Geoparks: an alternative for local development" which took place on 13 - 15 November in the city of Trinidad, Flores, Uruguay, and was organized by the UNESCO Regional Office and the Municipality of Flores (Uruguay), with the financial support of the IUGS.

Group on Earth Observations (GEO), the IUGS President was involved in a number of activities in order to support GEO's work: a) Survey progress in the area of Architecture and Data Management; b) Ratification of IUGS Principal designation; c) agreement with the GEO 2012-2015 Work Plan version submitted for review; d) Acceptance of a "List of Datasets for the GEOSS Data-CORE; e) actions directed to nominate IUGS representatives to the "Advancing GEOSS Data Sharing Principles Working Group" and to the "Post-2015 Working Group". In addition the IUGS President was kindly represented by Vice-president Jacques Charvet at the Eight Plenary session of the Group on Earth Observations (GEO-VIII) held in Istanbul on 16 – 17 November 2011.

OneGeology. - The IUGS President was involved in the activities of the OneGeology Steering Group, specifically with regard to: a) Participation in the OneGeology Steering Group meeting (Tokyo, Japan, 27th - 28th September 2011) where he was kindly represented by IUGS Councillor Colin Simpson; b) Evaluation of the future of OneGeology; c) Establishment of priorities in a list of 14 "possible future goals" for OneGeology; d) Establishment of the OneGeology Web Services Accreditation Scheme; 5e Agreement on a list of Intellectual Property Rights and Assets to be assigned to the new corporation OneGeology Limited.

The IUGS President also attended and participated in different international meetings: a) opening ceremony of the XIV Latin-American Geological Congress and the XIII Colombian Geological Congress, which was held in Medellin, Colombia on 31 August – 2 September 2011; b) VIII Forum Italiano di Science Della Terra (Geoitalia 2011, Torino, 19-23 September 2011), although due to flight problems and an emergency landing he missed the Opening Ceremony; c) International Workshop on "Sharing Experiences on the Delineation of the Outer Limit of the Continental Shelf", Ministry of Foreign Affairs, Buenos Aires, 12-14 October 2011.

The IUGS President was also involved in other administrative and organizational actions dealing with all IUGS internal bodies and external organizations (Permanent Secretariat, National Committees, Affiliated

organizations ICSU, ICSU Regional Offices, GeoUnions, IUGS Committees, Episodes, E-Bulletins, etc.) as well as answering all kind of requests and sending permanent reports and information to the EC and Bureau.

During 2011 Alberto Riccardi Chaired the Argentinean Commission on Stratigraphy, that is currently completing the National Stratigraphic Lexicon, participated as an adviser to the Argentinean Government on mapping activities of the Argentinean Geological Survey and on the Argentinean proposal on the continental shelf under the United Nations convention on the Law of the Sea, and served as Professor and Head of a Museum Division at La Plata National University.

The Committee ACCEPTED the President's report.

4.b. Past President's Report

Zhang Hongren, Past President

This past year my efforts were focused within China. The Nominating Committee has been my major responsibility. There is a separate report that I will present on the Nominating Committee. Wherever possible I provided support to the IUGS with related activities in China.

As I had in previous years once again I attended the GOVERNING BOARD MEETING IN 2011 meeting of the International Research Center of Karst in Guilin. This is a joint effort of IUGS and UNESCO. Robert Missotten was also in attendance at this meeting.

In the latter part of 2011, I attended the annual meeting of the China National Committee for IGCP in Beijing. The meeting provided detailed review of activities in 2011 and revealed the plan for 2012.

I also considered the possibility of hosting the Permanent Secretariat in China.

The Committee ACCEPTED the Past President's report.

4.c. Vice Presidents' and Councillors' Reports

Jacques Charvet, Vice President

Activities for 2011 included:

- Organized and chaired the meeting of the ARC on ILP, in Paris, on January 18th and circulated the draft of the report until acceptance by all the members,
- Contacted the IUGG staff in order to have a joint report on ILP and circulated the common text to ILP, asking for comments, before sending it to the EC,
- Attended the end of the IGCP Board meeting, UNESCO building, February 17-18,
- Attended the meeting of the Statutes and Byelaws Task Group, February 18-19, UNESCO building, and had numerous electronic exchanges with the chair and other members of the Task Group throughout the year in order to improve the draft,
- Attended the meeting of the Strategic Plan Committee, February 20, Paris, Hotel Ibis-Cambronne, and had regular electronic exchanges with Attilio Boriani, chair of the Committee, for the implementation of the draft of Strategic Plan,
- Attended the IUGS EC meeting in Paris, February 21-24, with the evaluation of 6 reports, participated to the preparation and attended the ceremony of the IUGS 50th anniversary,
- Attended the meetings of the EGN Advisory Committee and Coordination Committee, in Brecon, Wales, March 28-31, and provided names of potential reviewers for the European applications,

- Represented the IUGS at the opening ceremony of the IGMA 5000 workshop, in Beijing, April 25, and attended the workshop with two presentations, April 26-29.
- Attended the meetings of the EGN Advisory Committee and Coordination Committee, in Larvik, Norway, September 13-15, and represented the IUGS at the opening ceremony of the 10th European Geoparks Conference in Langesund, September 16.
- Represented the IUGS at the GEO Plenary meeting in Istanbul, November 16-17,
- Attended three meetings and corresponded through e-mails with the UNESCO Geoteam for the preparation of the ceremony of the IGCP 40th anniversary, as the IUGS contact.

Task Group on Adhering Members

- Exchanged e-mails with the members of the Task Group on Adhering Members, several National Committees, and with the Secretary General in order to implement the heading “National Committee Highlights” on the IUGS website and to update the information on NCs,
- Checked all the websites of National Committees and prepared a corrected spreadsheet of the contacts,
- Worked on a synthetic spreadsheet of NCs, with information on their composition, number of meetings etc., in order to establish a draft of an operational model for Adhering Members.

Ochir Gerel, Vice President

Activities in 2011:

- Informed Mongolian Geologists and students at the Annual Meeting of the Mongolian Geological Society, Roundup 2011, about the celebration of the IUGS 50th Anniversary, IUGS history, recent activity of the IUGS bodies, and presented IUGS Video.
- As a member of the IUGS Strategic Planning Committee worked with colleagues to develop IUGS Strategic Plan.
- As a member of Mongolian Stratigraphic Commission introduced and discussed with other members activity and proposals of the International Commission on Stratigraphy.
- Introduced to Mongolian geologists new initiative and activity of Working Group on Forensic Geology.
- Organized as a chairman the Symposium “Mongolian Petrology and Metallogeny” held on April 2011. Edited and published papers presented in the Symposium. Distributed IUGS Video, and other information.
- Established relation with AGID Geoethics Working Group for Geoethics, published abstract at special session of Working Group for Geoethics, Pribram, Czech Republic, October 10-14, 2011.
- Organized and leded study of possible areas to create Geopark in Mongolia.
- Member of Advisory Editorial Board of “Resource Geology” (Japan),
- Member of Editorial Board, Associate Editor of the “Global Tectonics & Metallogeny”, .
- Editor and author of the second edition of “Geology and Mineral Resources of Mongolia”, III, IV volume
- As an expert of Working group on standardization in Mining assessed eight standards in coal and ores.

Other activity included: teaching, advising of PhD students, leading international and domestic research projects, and consultancy work for mining companies.

Ezzoura Errami, Councillor

During the annual meeting of the IUGS executive committee held in Paris in 2011, I was assigned one main task. The CoGE ARC review is done and the report will be presented during the next IUGS annual meeting for discussion.

As representative of IUGS in the UNESCO Geoeducation initiative, I organized a roundtable during the AGN conference held in Morocco where UNESCO and CoGE were invited with other potential partners to debate their projects on the continent. I am also following the discussion going on the subject.

Relationship between IUGS and ICSU-ROA

During the year, I have not received any information from the office.

Relationship between IUGS and UNESCO Nairobi Office

In order to promote the IGCP projects near Africans, UNESCO Nairobi Office organized a workshop entitled "IGCP in Africa: Workshop on skills development in preparing project applications". They are also involved in the UNESCO and CoGE initiatives on Geoeducation in Africa. Dr Félix Toteu, the Earth Sciences program specialists in UNESCO Nairobi Office, represented UNESCO in the First International Conference on African and Arabian Geoparks held in 2011 in El Jadida (Morocco) and in the roundtable on UNESCO and CoGE initiatives on Geoeducation in Africa.

Relationship between IUGS and UNESCO Cairo Office

I have a regular contact with Dr. Mohamed Al-Awaah, the Earth Sciences program specialists in UNESCO Cairo Office. AAWG and AGN in collaboration with UNESCO Cairo office organized the First International Conference on African and Arabian Geoparks held in 2011 in El Jadida (Morocco).

Review of reports

I am reviewing 6 reports of the following affiliate and adhering organizations: Slovakia, AAWG, GSAf, GV, ISRM, ISSMGE.

Wesley Hill, Councillor

2011 Councillor Progress Report

62nd EC Meeting Paris, Assigned Action Items:

ACTION ITEM #8: Councillor Wesley HILL to determine the exact structure and type of relationship that exists between the IUGS TGGGB and the new Tier 2 UNESCO Geochemical Institute in China. (Completed)

ACTION ITEM #9: Councillor Wesley HILL to act as IUGS EC official liaison for IUCN related activities and with the Task Group on Geoheritage. (Completed)

ACTION ITEM #24: Councillor Wesley HILL to obtain and populate a large scale poster display for use by the IUGS in pending conferences. (Working toward)

ACTION ITEM #48: ARC on COGE to be completed (Chair Councillor Wesley HILL, Secretary Councillor Ezzoura ERRAMI) (Completed)

2011 Councillor Activities:

- Transitioned with Peter Bobrowsky and took over the role of IUGS liaison to IUCN for geologic World Heritage. Four new geologic World Heritage sites were nominated for 2012 designation. I was in charge of finding expert desk-top evaluators and subsequent reports for the newly nominated sites. The full IUCN World Heritage report will be delivered during the World Heritage agenda item. A meeting with the UNESCO geologic WH coordinator is schedule for February 2012 at UNESCO (during the IGCP event.)
- Attended the 2011 European Geoparks Conference in Norway and met with Colin Simpson, IUGS GGN Liaison, and Jacques Charvet, IUGS EGN Liaison, in order to coordinate efforts regarding geologic World Heritage, Geoparks, and geoheritage. Collin and I met to discuss the update/revision

to the GGN/IUGS new TORs regarding the Geoparks Initiative. Since the IUCN World Heritage TORs and partnership is very similar, it makes sense to coordinate between the two IUGS documents and relationships.

- In July, was an on-site evaluator (with Patrick McKeever) for the Moroto Japan Geopark application which was then awarded Geopark status in September 2011 during the European Geoparks conference in Norway.
- Coordinated with Dr. Patrick de Wever, Chair, Task Group on Geoheritage as the TG was in its first year of development. I supported Task Group initiation and assisted with any IUGS administration. The TG needs to stay informed of IUGS relations with geologic World Heritage, Geoparks, and COGE education initiatives.
- Met with Dr. Ed de Mulder and Dr. Wolfgang Eder during the GSA/GV joint meeting in Munich, Germany regarding IUGS communications and Earth Science Matters (ESM) foundation. I made reporting recommendations to ESM regarding their progress & budget reporting to IUGS EC since the information was not circulating. I coordinated efforts with Alberto concerning this meeting.
- As Chair of the IUGS ARC review of the Commission on Geoscience Education and Technology Transfer (COGE), coordinated all meeting details, agenda, external committee members, committee travel information, document requests, and meeting preparations and arrangements. Zohra Errami was the Secretary for the ARC and was a big help compiling the COGE ARC Report and COGE follow-up.
- Met with Sarah Gaines from UNESCO during the Geological Society of America (GSA) annual meeting in the U.S. regarding UNESCO's initiative on Geoscience Education and Africa.
- Worked with IUGS Young Essay Contest winner from the Netherlands regarding her registration and travel grant to IGC Brisbane and coordinated all communications with IGC Committee.
- Met with Paul Kay from IGC, Rich Calnan, and Sarah Gaines at the GSA meeting regarding initial coordination for the IUGS-IGC booth and UNESCO partnership within the booth space.
- Gathering information regarding IUGS exhibit design, details, price quotes, panel themes and text, UNESCO panel themes/materials, and IUGS Commission/TG involvement in the IGC booth. Full information will be presented during the IGC section of the agenda.
- Worked with Colin Mabry, videographer, to produce a 2nd copy of the IUGS video that is not oriented toward the IUGS 50th Anniversary.
- Obtained price quotes and information regarding 2nd order of the edited IUGS video to distribute on flash drives during IGC. Also obtained the new IGCP 40th Anniversary book to also include on the flash drives for distribution.
- Attended by conference call, the U.S. National Committee for the Geological Sciences (USNC IUGS) fall meeting at AGU (USA.) I meet monthly with the Chair of the USNC IUGS (Tom Casadevall) to coordinate IUGS related information.
- All assigned reports and preparations for 63rd EC meeting Spain, and IGCP event Paris.

Colin Simpson, Councillor

1. IUGS E-Bulletin Editor.

During the period February 2011 to January 2012 a total of 11 E-Bulletins were produced (e-Bulletins #59 to #70) and issued monthly. The e-bulletin is distributed by the Secretariat by email in txt format, and also with a word doc format attachment. This year the forthcoming conferences list is now only included in one issue of the E-Bulletin then the Secretary General Peter BOBROWSKY places those items on the IUGS website listing of conferences so that no, or minimum, duplication of such notices occurs in the E-Bulletin.

2. Participation as IUGS representative:

(A) Global Geoparks. As the IUGS Representative on the Global Geoparks Network (GGN) Bureau Colin participated in the GGN Bureau Meeting held during the European Geoparks Network (EGN) Conference in Langesund, Norway, 15 - 20 September 2011. IUGS leaflets were distributed via the Registration Desk at the EGN Conference.

That EGN Conference in Norway meeting, at which Jacques CHARVET also attended, provided an opportunity for additional IUGS-GGN-EGN discussions on the Draft IUGS-GGN Terms of Reference

document which was discussed with Patrick McKEEVER (GGN representative) and revised. The revised version was agreed to by Jacques, Colin and Patrick, and on 1 November 2011 Colin circulated the Draft to the IUGS-EC members for comment via email (as requested under ACTION ITEM #13).

Colin was unable to attend the 1 day GGN meeting on 31 March 2011 at UNESCO Headquarters in Paris.

Colin and Jacques CHARVET continued their collaboration with the GGN by providing the GGN/EGN with contact details of geoscientists who could assist with undertaking desktop reviews of the initial Application documents for new Geoparks, or term renewals. During 2011, with assistance from Peter BOBROWSKY'S IUCN reviewer's information, the GGN was provided with several names of potential assessors for 9 GGN Geoparks Applications.

(B) IUGG 2011. Colin attended the IUGG Council meeting on 27 June and 2 July 2011 in Melbourne, Australia, on behalf of Alberto. The Council was held during the IUGG XXV General Assembly (their equivalent of the IGC). IUGS leaflets were left on the information desk with other leaflets.

(C) ONEGEOLOGY Steering Group Meetings. Colin attended the OneGeology Steering Group Meeting in Tokyo on 27-28 September on behalf of Alberto. This meeting gave approval for OneGeology to proceed with incorporation as a company. IGC leaflets were distributed at that Meeting.

3. Ad hoc Review of the IUGS International Commission on the History of Geological Sciences (INHIGEO)

As requested at the 2011 EC Meeting in Paris an Ad hoc Review of INHIGEO was conducted 1 August 2011 in Toyohashi, Japan to coincide with the INHIGEO 2011 Annual Meeting and Conference there. The Review Committee Members were Peter BOBROWSKY - IUGS Secretary-General (ARC Chair), Colin SIMPSON - IUGS Councillor (ARC Secretary), Niichi NISHIWAKI (Faculty of Social Research, Nara University), and Hisashi NIREI (The Geo-pollution Control Agency, Japan, Member of IUGS-GEM Commission).

The INHIGEO Commission members at the ARC meeting were Silvia FIGUEIRÔA (President), Barry COOPER (Secretary General), David OLDROYD (Vice-President), David BRANAGAN (Past President). The ARC Review Report was compiled by Colin and passed to all Review Committee members for comment and editing prior to the final version being distributed to E.C. Members.

4. Involvement in IGC 2012 Australia

Since his appointment to the Organising Committee for the 2012 IGC in Brisbane, Australian Colin has participated (either in person or by conference phone) in all the main meetings of the Organising Committee (IGC-OC), The IGC Science Program Committee (PROCOM) and the IGC Congress Committee (IGC-CC).

5. Episodes item

Colin prepared an article on his profile which Alberto Riccardi kindly edited before it was sent to the *Episodes* Editor and published in the *Episodes* September issue (Vol. 33 No. 3).

S.K. Tandon, Councillor

During the year under report, I took part in the various email based discussions on issues that came up for discussion and consideration in the EC of the IUGS. I followed up on the issues pertaining to the restoration of inactive member countries to an active status. I also interacted regularly during the year with the Editor of *Episodes* for ensuring its timely publication.

In my capacity as one of the Vice-Presidents of the Geological Society of India, I attended its Council meetings and presided over the Foundation Day function which had a theme session on Environmental Security of the Planet Earth. Students from various schools made presentations on various aspects of environmental protection and highlighted the negative impacts on the environment because of the human

transformation of the earth.

Under the INSPIRE (Innovation In Science Pursuit for Inspired Research) program of the Department of Science and Technology of the Government of India, I interacted with school students at several places in various parts of India to motivate them to take up the challenges related to global sustainability and to take up careers that are centred on the study of coupled social-environmental systems. I also introduced the activities of the IUGS to the students in some of these sessions.

My other activities included my role as a member of the Research Council of the National Geophysical Research Institute, Hyderabad and that of the Advisory Committee of the University Centre of Earth and Space Sciences, University of Hyderabad. In my latter association, I actively steered a discussion meeting on “Goals for Earth Sciences in this decade”. Also, I held a short term visiting professorship in May-June, 2012 at the Centre of Earth Sciences, Indian Institute of Science, Bangalore. I continued my association with the CSIR, India as Chair of their Committee on Disaster Preparedness. The function of the Committee was to evaluate research proposals in this area for funding.

I pursued my interest in the area of River Science and actively participated in the meetings of the Fluvial Geomorphology group of the Ganga River Basin Management Program. This is an initiative of the Ministry of Environment and Forest to prepare a strategy document for the rehabilitation of one of the large tropical river systems on the globe that supports a population of about 400 million people. I also delivered an invited talk on “Living with disturbed large river systems” at the recently held IGCP 582 meeting held at the Indian Institute of Technology, Kanpur on 'Tropical Rivers: hydrophysical processes, impacts, hazards and management'. I also held interaction sessions on 'River Science for securing River Futures' in various institutions that include the Indian Statistical Institute, Kolkatta and the Jawaharlal Nehru University, New Delhi.

I delivered the Foundation Day Lecture of the INCOIS (Indian National centre for Ocean Information Science), Hyderabad on ‘Quest for water wisdom’. I also delivered an invited talk at the Earth Sciences mini-symposium held at the mid-year meeting of the Indian Academy of Sciences, Bangalore on 7th July, 2011. The talk was on “Understanding the Earth’s Surface”

I presided over the annual convention of the Indian Association of Sedimentologists held at the JNU, New Delhi in November, 2011. I have also been nominated as a member of the first National Geoscience Advisory Council that has been constituted by the Ministry of Mines, Government of India.

Finally, I continued to mentor faculty colleagues and research students at the Department of Geology, University of Delhi on various research themes in the area of Earth’s Surface Processes and at the IIT, Kanpur on the Connectivity analysis of a man-made avulsion.

The Committee ACCEPTED the Vice Presidents’ and the Councillor’s reports.

4.d. Secretary General's Report (Peter Bobrowsky)

For the year 2011, the Secretary General’s office had a much reduced work load. Bobrowsky’s activities were generously supported by the Government of Canada, Geological Survey of Canada (salary, travel, etc.). In his capacity of Secretary General Bobrowsky attended the following 2011 events:

- IUGS 62nd Annual Meeting of the Executive Committee in Paris (Feb)
- IGCP Bureau Meeting in Paris, France (Feb)
- EuroGeoSurveys annual meeting in Brussels, Belgium (Mar)
- GeoUnion meeting in Paris, France (Apr)
- Canadian National Committee for IUGS in Calgary, Canada (Apr)
- Ad Hoc Review of INHIGEO in Japan (Aug)
- North Korea National Committee meeting in Pyongyang, DPRK (Aug)
- International Council for Science General Assembly in Rome, Italy (Sept)
- GeoUnions meeting in Rome, Italy (Sept)

- Canadian National Committee for IUGS in Ottawa, Canada (Nov)

Primary activities during 2011 included:

- Deliberations with IGCP Bureau, Board and Secretariat for financial allocations, project approvals and reporting/assessments
- Provision of information updates to the IUGS Executive Committee
- Contributions to IUGS Bureau actions and decisions
- Interactions with the IGCC
- Transfer of IUCN liaison activities for World Heritage Evaluations to W. Hill
- Interactions/actions with IUGS Commissions and Task Groups
- Interactions/actions with Episodes editorial staff
- IUGS website development, management and maintenance
- Production assistance (to Wesley Hill) of new IUGS poster
- Participation in the Canadian National Committee for UNESCO GeoParks
- Liaison to the Canadian Commission to UNESCO office
- Chair of ARC (with Colin Simpson and others) on INHIGEO
- Interactions/actions with 34th and 35th IGC LOC
- Ex-officio member of CNC IUGS and CNC IGCP
- Member of IGU Commission on Geoparks
- EC member visa letters

The Secretary General also provided routine responses, assistance and administrative actions dealing with the Permanent Secretariat, National Committees, ICSU HQ, ICSU ROs, GeoUnions, Episodes, the IUGS website, E-Bulletins, OneGeology, IGCC, EuroGeoSurveys, YES, Geological Society of London Publications House, AGI, GSA, EGN, etc. as well as responding to requests from within the IUGS EC.
2 February 2012 (Submitted by Peter Bobrowsky, Secretary General IUGS)

The Committee ACCEPTED the Secretary General's report.

4.e. Treasurer's Report – Rapporteur: William Cavazza –presented orally.

Total Income for 2011:	\$453,766.94 (USD)
Total Expenses for 2011:	(\$463,742.00) (USD)
Balance for 2011:	(\$9,975.06) (USD)

- Total allocation for IGCP 2011 was \$247,000 USD as compared to \$180,500 USD in 2010, \$189,500 USD in 2009 and \$166,000 USD in 2008. During 2011 IUGS received from UNESCO \$40,955 USD for IGCP 2011 and \$18,923 USD for IGCP 2010.
- IUGS has still to receive from UNESCO by March 31st, 2012: \$21,500 USD for IGCP 2011.
- Bank and financial interests were: \$21,280.96 USD.
- IUGS recovered the amount of \$53,807.32 USD as fees for previous years.

IUGS expenditures often do not reflect the real costs. For example, the IUGS Secretariat, partially sponsored by IUGS, is graciously hosted by the United States Geological Survey in Reston, Virginia USA. The costs related to IUGS meetings 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 their travel costs. These forms of support allow the IUGS a considerable amount of savings each year. IUGS is extremely grateful to the Argentinean, Canadian, Italian and the USA governments for this generous support that enables the Union to invest significantly more in science development than would be otherwise possible.

The Committee ACCEPTED the Treasurer's report.

4.f. Permanent Secretariat's Report

Richard Calnan, Secretariat

OVERALL OBJECTIVES

- To work in close contact with Bureau and EC members;
- To facilitate communication among various IUGS Bodies;
- To develop and maintain non-geological databases (addresses, IGCP);
- To assist Bureau and EC members with administrative services, when required and possible (e.g. mass mailings, proof-reading, photocopying, forwarding of various IUGS documents);
- To organize IUGS-related meetings;
- To inform IUGS related bodies of activities of the IUGS EC (transcribing and distribution of minutes);
- To archive IUGS materials related to the above objectives.

ORGANIZATION (broad description)

The IUGS Secretariat consists of one half-time Executive Secretary, Richard Calnan and two part time office assistants (Nancy Zeigler and Freeha Aslam).

EXTENT OF NATIONAL/REGIONAL/GLOBAL SUPPORT

USGS provides most of the expenses (office space, salary, plus travel) of the Secretariat. IUGS contributes up to USD 15,500 /year to reimburse miscellaneous expenses, on a case by case basis. The Secretariat keeps the Chair of the US National Committee apprised of the work of the Secretariat.

CHIEF ACCOMPLISHMENTS IN 2011 (other than routine)

- Updated FM database of 12,000 emails by names, bodies and positions;
- Distributed 11 E-Bulletins to over 12,000 persons (each mailing);
- Distribution of the 50th Anniversary video;
- Maintained an inventory of IUGS materials;
- Prepared and staffed IUGS/IGC booth at GSA in Minneapolis, CO.
- Hosted the 50th anniversary celebration with UNESCO and EC staff assistance;
- Prepared for EC 63 in Madrid
- Started preparations for 34th IGC in Brisbane.
- Worked with UNESCO staff on IGCP support.
- Represented IUGS in discussions with legal counsel
- Sent out repeated calls for EC Nominations
- Managed several ballots that were sent to the entire Council

CHIEF PROBLEMS ENCOUNTERED IN 2011

- Some deadlines were not met.
- Confusion among IGCP Project Leaders regarding reporting procedures

CRITICAL MILESTONES TO BE ACHIEVED IN 2012

- Sort through historical archives in Eggenburg, Austria
- 40th Anniversary Celebration of IGCP, Paris, February, 2012

- 63rd EC Meeting, Madrid, Feb. 2012
- Transfer to new Secretariat
- 34th IGC, Brisbane, August, 2012

ANTICIPATED RESULTS/PRODUCTS NEXT YEAR

- The 63rd EC meeting will be hosted at Gipuzkoa Regional Government Palace, San Sebastian, Spain, February 2012
- Production and display of new IUGS exhibit at 34th IGC, Brisbane
- Orderly transfer to new Secretariat, during the period from Sept.-Nov, 2012

Alberto Riccardi gave special thanks to the USGS for the efficient Secretariat role which also included Freeha Aslam who was not present.

The Committee **ACCEPTED** the Secretariat's report.

- **ACTION ITEM # 1.** IUGS President Alberto RICCARDI to write to the Government of China (MLR) in March/April regarding the potential transfer of the Secretariat to China if the IUGS EC has not yet received any communiqués from them in the near future.
- **ACTION ITEM # 2.** The Secretariat should assess, clarify and quantify what historical IUGS information has already been digitized by Anne DEHLS and what still needs to be digitized.

5. ANNUAL REPORTS AND FUTURE PLANS OF IUGS BODIES

5.a. COMMITTEES

5.a.1. Nominating Committee (NC) - Rapporteur: Zhang Hongren

At the end of April, 2011, after the 62nd EC meeting in February, the Nominating Committee (NC) sent out letters of invitation to ask member organizations to submit their nominees for the next EC. The deadline was the end of September.

Originally we planned to convene the Nominating Committee in the beginning of February 2012, just before the 63rd Executive Committee meeting. The Ministry of Land and Resources of China promised to provide a suitable venue and necessary facilities.

The major problem we are facing now is the shortage of recommendations. There were only 14 nominees from 12 countries and organizations. In December, 2011, we extended the deadline and launched a new attempt to solicit nominations from members of IUGS. However, the situation didn't change very much.

Following the tradition, the host organizations of nominees of the President, Secretary General and the Treasurer are expected to provide a guarantee of financial support for the officers' IUGS activities during their term. Until now, among the three future bureau members we have received only one guarantee from the three host organizations.

The current situation is very difficult for the NC. Within my limited experience, IUGS members were usually very active in competing for positions in the Executive Committee. The current lack of candidates is both disappointing and surprising. This may be a side-effect of the world financial crisis.

The most serious problem is that no member organization has submitted nominee for the position of Secretary General at the time of this report.

The Secretary General is one of the busiest members of the EC and, at the same time, the most "expensive" position of the EC. The position requires much global travel. The Nominating Committee can not substitute the member organizations to make the decision.

The Nominating Committee is asking the opinion of our members and the suggestion of EC and will work out the slate after the 63rd EC meeting in Spain.

The Committee ACCEPTED the NC report.

5.a.2. Publication Committee (PC) - Rapporteur: Fred Spilhaus

Episodes

Since the delays that occurred at the time of transition of editorial offices, *Episodes* has caught up and now maintains a fairly regular quarterly frequency. Work is still needed so that the issues are regularly mailed in the month of the cover date. The types of articles and reports have increased as has the geographic spread of authors. More information about IUGS has also appeared over the last year in keeping with discussions at the time of the 2011 EC meeting. The historical items on past IGC's make an interesting lead-up to the 2012 IGC.

The PC members understand the difficulties the Editor faces in producing a high-quality journal that is truly reflective of the scientific and geographic breadth the Union and the author and reader community. We commend the Editor for the positive manner with which he has received and dealt with comments from the PC. A recurring concern from the PC has been that some articles needed considerable help with language and/or organization. It has been difficult to deal with these problems without significantly delaying publication because they have been found late in the publication process. The PC in conjunction with the Editor will be undertaking some changes in process to deal with these matters in a way that enhances quality without delaying publication.

Last year, the PC proposed and the EC endorsed a procedure for the selection and maintenance of a strong Editorial Board. It has taken somewhat longer to implement that procedure than expected at this time last year. Nonetheless, the PC is now ready, pending EC approval, to move ahead with the first class to be appointed under this procedure. A list of excellent candidates has been suggested by the Editor. The list (appended at the end of this report) has a good spread of scientific interests and geographic locale. This list has the endorsement of the PC because of the strong support of the Editor for these individuals and the personal knowledge of PC members. In order to establish the rotation pattern envisioned in the process, different individuals will be appointed for different term lengths, with the possibility for reappointment to the standard 4-year term. We feel that the new structure will give both strength and continuity from year to year. We request that the EC authorize the Editor to invite individuals from this list to serve and that the appropriate formal appointment letters and thank-you letters to those whose terms will end then be sent on behalf of the EC.

Episodes Website

The Episodes website has improved over the last year. Issues are now posted at the time the paper version is published; in the past the issues were being held 6 months. Complaints about the slowness of opening an issue have also been addressed with the recent issue. Previously, the reader had to wait for the entire electronic issue to open; this can be very slow because of the size of the file with its numerous high-resolution color images. Starting with the September 2011 issue, the table of contents opens quickly and the individual articles are linked to it. This approach gets the reader to the content quickly, although it means one cannot scroll through the entire issue.

Books

The relation with the Geological Society of London continues to be very professional and amicable. GSL has good processes for assuring high quality in both subject matter and production. We have had no contact about INHIGEO or the schedule for the production of the book History of the IUGS (1961-2011). We understand the Secretary General has been working on this area. There have been a few inquiries about publications arising from the upcoming IGC. These have been referred to the Congress organizers.

Copyright Permissions

The PC is in the process of formulating a copyright permissions policy for Episodes, which should simplify the processing of requests and remove some of the current ambiguities. Since the move of the editorial office to China, copyright transfers have been collected from authors. This step makes it clear that IUGS has the right to deal with permissions for these articles. It is unlikely that authors will take exception if IUGS grants permissions for the use of figures, tables, or short extracts; thus, the policy will cover these materials even during the period prior the point transfers were obtained. Because IUGS has always been the publisher of Episodes, we do not need to worry about rights that might be asserted by a third party. Granting permissions to use material from books published on behalf of IUGS is not so clear cut. Different arrangements have been made with different publishers. We have not been able to locate copies of the publishing arrangements for the older materials. Thus, we do not know whether IUGS has the right to grant permission. In some instances the publisher has asserted the right to handle copyright permissions, which is a common practice. This gray area continues to create problems. Since IUGS was not the publisher, we may be taking a big risk in assuming rights that may have been given to the publisher.

Proposed List of Associate Editors for Episodes

Prof. Eldridge Moores - structural geology, tectonics – USA
Prof. Sylvi Haldorsen - hydro geology and climate change – NORWAY
Prof. Victor Mocanu - tectonics – ROMANIA
Dr. Godfrey Nowlan - paleontology, geoparks – CANADA
Dr. Kristine Asch - mapping, database management – GERMANY
Dr. Shaun Reeder - geochemistry - UNITED KINGDOM
Prof. Stan Finney - stratigraphy – USA
Prof. Felix Toteu - mining, exploration – CAMEROON
Prof. Ryo Matsumoto - exploration – JAPAN
Dr. Marita Bradshaw - petroleum – AUSTRALIA
Prof. Bor-ming Jahn – geochemistry, crustal growth- TAIWAN [continuation]
Prof. David Oldroyd – history of science – AUSTRALIA [continuation]
Prof. Dominique CHARDON – tectonic geomorphology –FRANCE
Prof. Dr. Wenjiao Xiao – lithosphere evolution – P.R. CHINA
Dr. Inna Safonova – petrology and continental dynamics - Russia

The Committee ACCEPTED the PC report.

- **ACTION ITEM # 3.** PC Chair Fred SPILHAUS to send an update status list of the IUGS related publication copyright for the past four years.
- **ACTION ITEM # 4.** PC Chair Fred SPILHAUS and PC committee should provide a written report to the EC within the next two months detailing a strategy for rotation of *Episodes* Associate Editor appointments/transition, paper review process, etc.
- **ACTION ITEM # 5.** PC Chair Fred SPILHAUS to provide a proposal on the best way to improve the English language for papers published in *Episodes* in parallel with their refereeing.

5.a.3. Strategic Planning Committee (SPC) - Rapporteur: Attilio Boriani

Attilio Boriani informed on the main point of the Strategic Plan proposed by the Strategic Planning Committee. The document is included as an Appendix. The President considered that the Strategic Plan is ready to be submitted for the approval of the IUGS Council meeting, that will be held next August in Brisbane.

The Committee ACCEPTED the SPC report.

5.a.4. Finance Committee (FC) - A.Brambati (Chair), P. Leahy, Z. Johan (Members)

Rapporteur: Power Point Presentation by Brambati

Introductory rationale

The current IUGS Statutes (art. 44) indicate that a Finance Committee “shall make a proposal each year on the annual budget for the Executive Committee’s consideration, prepare long-term plans for the finances of the Union, and advise Executive Committee (EC) on the management of funds and ways of improving the funding of the Union”. In addition, the IUGS Strategic Action Plan (2001), recommendation 18 recognized the need for IUGS to re-establish an Advisory Board for Finance (ABF) with the main goal of seeking new external funds. According to this document, specific items to be considered would be:

1. Investment in financial assets
2. Electronic commerce of IUGS products
3. Royalties of commercial sales of IUGS publications

Furthermore, the Strategic Action Plan (2001) and the Mid Term Vision (2002) considered that the Union’s financial situation could probably be improved through raised visibility, supporting events related to IUGS aims, and receiving pro-person contribution from registration fees collected during the IGC.

Roles and aims

According to the Terms of References issued by the IUGS Executive Committee, the primary roles of the Finance Committee are:

1. To identify external financial opportunities for IUGS.
2. Propose to the EC ways to improve IUGS financial operations, including the allocation of funds in relation to the strategic priorities and missions adopted by EC.
3. To audit IUGS finances and present a report to the IUGS Council every four years before the election of a new EC.

There is a problem of relationship between “Finance Committee” and “Advisory Board for Finance (ABF)”. If both of them still exist, the decision chain is rather long and counterproductive. The EC should erminate the AFB in order to permit to the FC to put forward innovative suggestions.

PROPOSED STRATEGIES

STRATEGY 1 (looking for partners)

Research projects and programs generated by the IUGS have so far responded mostly to the demand of universities and/or institutes of Academy of Sciences, being strongly oriented towards fundamental science. Some of these efforts have been very successful (as for example IGCP) and have promoted the formation of multinational research teams worldwide. However, today IUGS must recognize that the nature of scientific research has changed during the last fifty years, in addition to pure scientific research or “curiosity driven” research it expanded to include more “application driven” research. Therefore IUGS must take into account these changes in its future activities, in its orientation and in the determination of its priorities. Some unexplored economic and financial targets should follow from these new directions.

THEREFORE

As probably IUGS cannot generate an important amount of financial support directly from sponsors (in general they are reluctant if there is no return), IUGS should:

- 1) Significantly enlarge its involvement with respect to the mining exploration and production industry, to the industrial minerals, various environmental fields (sea, ocean, land etc), hydrogeology, engineering geology, urban geology, cultural heritage, geoparks etc. IUGS should contact potential corporate partners indicating the program proposals, which may interest them.
- 2) Create a network of scientific collaboration with private and/or public companies working in Earth Sciences. IUGS should encourage them, by appropriate marketing, to propose subjects, which could give rise to scientific projects or to other types of cooperation. They will financially cover these projects and IUGS will take the benefit. This kind of relationship should increase the cooperation between scientists and industry, which is necessary considering the present economic situation.

3) Initiate seminars and/or specific scientific meetings, training courses, and organize projects such as: i) scientific audits, and ii) organization of excursions.

STRATEGY 2 (looking for donors)

- 1) IUGS should investigate the possibility of creating a Foundation to solicit donations from individuals, agencies, private and public bodies and foundations. Donations could be driven towards specific events/items, as for example a self-contained project (education, public awareness, etc), the activity of a task group, or the organization of a congress/meeting. Alternatively, donations and sponsorships could be given without a specific task (difficult to have for the above mentioned reasons). Technically, it will be relatively easy to implement the activities of an IUGS Foundation, as the IUGS is already an organization exempt from income tax [501(c)(3) according to the U.S. Internal Revenue Service]. Donations and gifts will be tax deductible to the extent of the law.
- 2) It is important as a first step for IUGS to identify and clearly communicate its unique role. Unless a strong case can be made for financially supporting IUGS efforts, it will be impossible to effectively and successfully solicit philanthropic support from individuals, groups, or industrial partners.
- 3) Rather than have a generic donation fund, IUGS might have funds and endowments designed to meet specific needs (i.e. student support, prize fund, Earth Science education, payment of developing countries IUGS fees, congress participation, conference + workshop fund, publication fund, general fund + a number of specific endowments bearing the donor's name, and aimed to other specific goals). Clearly, potential donors should be either individuals or groups familiar with the IUGS or outside individuals/foundations. The former will be more keen to donate to funds related to the inner working of the IUGS (or generate funds like the Hutchinson Fund devoted to specific task) whereas the latter would be more interested in projects of higher external profile (education in Africa, medical geology, etc). Fund-raising strategy is different for the two types of potential donors. A more general issue to be considered is whether or not IUGS should receive funds from commercial industries as this could somehow taint our image as a scientific union. This point is related to the Strategy 2 and should be debated at length by the EC.

Strategy 2 is of interest in several ways. The tax exempt status may be of interest to US donors and probably to some other countries, but it is doubtful that IUGS will have influence in persuading non-US donors to give to IUGS. Today donors expect something in return for their investment, not a monetary return, but some tangible like international development because of geosciences, research breakthroughs, safer communities, cleaner water, and the like. They also want some sort of recognition of their involvement in the success of efforts they have supported. In fact, as it has been said, they are reluctant. This should be discussed at length involving the EC. A first answer could find a rational mixing of STRATEGY 1 and STRATEGY 2.

STRATEGY 3 (looking for other sources)

- 1) Investment of financial assets: Since the year 2000 improvements in the return on IUGS investments has been accomplished. For the future other options can be explored. However, there is a precautionary rule: a better interest rate involves more risk. More generally, financial investment should be considered a safeguard for difficult times rather than a mean of generating income.
- 2) Royalties and Publication revenue: Episodes might become a source of funding instead of an expense if only it would be managed differently. It could be electronically produced and marketed with great savings. Moreover IUGS-GSL books, from which IUGS receive royalties, need to be widely advertised and reviewed in as many countries as possible. A source of income that can be improved is the amount of money that GSL pays for books arising from IGC sessions. The past EC proposed that IUGS publish a series of books dedicated to thematic subjects: for example, the ten themes of the IYPE, etc.
- 3) Increasing the number of (i) Adhering Organizations and their category, and (ii) Associates Members (private and public institutions: the offer of Associate Membership to individuals could be made known through Episodes and in each issue of the IUGS Bulletin, which the Secretariat

distributes to about 7000 addresses). With regard to individual Associate Membership, it must be stressed that while membership of IUGS at a national level is the most important way that the Union ensures representation and participation from as many countries as possible, the potential form of individual membership (currently known as *individual associate membership* in IUGS Statutes) has not been exploited to any degree. Therefore it is useful to redefine the existing category of IUGS individual membership to encompass the real community of those interested in international geosciences. In some IUGS-related organizations membership includes subscription to a particular journal. This could be applied to IUGS by having a subscription to Episodes. As the current subscription to Episodes is very low (USD 30) it is necessary to release the journal electronically. Individual Membership could entail the following benefits: 1) Subscription to Episodes on-line (or in paper, but at a higher subscription rate), 2) IUGS Bulletins, 3) A certificate of membership, 4) Password for use of IUGS on-line directory, 5) Discount on IUGS-GSL publications (if this is possible). As a new policy the Union should (could) move towards the Associates members as a “sponsor”. If the goal is to increase revenue, the Union could do well by considering Associate Members as “sponsors” and use strategies used by other non-governmental organizations to gain sponsorships. It is much more likely that interpersonal relationships played a key role in attaining Associate members. Anyway, the strategies to be adopted are summarized in a special feature of the “Global Development Research Center” <http://www.gdrc.org/>. Here are outlined the strategies that could be useful for IUGS in its effort to gain new revenue (See also Strategy 4).

- 4) IUGS could offer to inactive members the opportunity to pay the last year membership fees (and of course the future) in order to go back to Active members status. It is a onetime opportunity to waive the backlog penalty. In this way the organization saves the fees of the past 2 years.

In conclusion: (i) IUGS could view Institutional Associate Members as sponsors. EC members should spend time in project-oriented canvassing of these members, (ii) IUGS can learn from successful GeoUnion partners, but be aware that this group is in competition for sponsors, (iii) individual Episodes subscribers could become “donors or supporters” to stimulate the Episodes circulation. And yet a couple of ideas relative to *EPISODES*—(1) make all electronic, thereby saving printing and perhaps more importantly international postage, (2) survey readers and ensure that the current form of the magazine is what they want, and (3) offer gift subscriptions for those that wish to donate funds to ensure that others may receive the journal. Finally, IUGS/*EPISODES* could collaborate with major geoscience publishers in the development of geoscience world, an on line service for the acquisition of geo-science journal articles globally.

STRATEGY 4 (developing a new policy to acquaint public and private institutions and scientist communities with IUGS, to increase the number of country members, stimulate participation of new partners, donors, associates to increase its knowledge and the funds): long term plans and advise in management fund

The world’s use of natural resources often intersects in complex ways, making it difficult to decide the best course of action. Population expansion will continue to increase demand for these resources and we must meet that demand. For that we need innovative solution to our planet’s most urgent questions, from the use of minerals and natural gas and the exploration of renewable energy. The IUGS can contribute to needed solutions and be the basic tool to make decisions based on science through its work supporting education, scientific collaboration and public awareness. IUGS and IGC may address critical issues related to geosciences, communicate findings and solutions to this issue to the public and policymakers and promote excellence in geosciences education to help ensure a talented scientific workforce (scientists and professionals). In this way IUGS will harness the geosciences to improve the quality of life, support economic growth and steward our planet’s resources looking to its potential supporters to partner with them.

Two plans are suggested:

(1) *Making the vision reality*: with an appropriate investment over 4 years (the EC IUGS turn) IUGS can address today challenges and strengthen the public understanding, science and education that will open up tomorrow’s opportunities. Since the Earth systems are so interrelated scientists either “curiosity driven”

or “application driven”, must work together to develop scientific, finalized and applied research to answer question as: (i) what balance of energy sources will best sustain our quality life and protect our environment? What are the potential impact of a changing climate and how can we mitigate and adapt to them? How can we prepare for and respond to natural hazard and mitigate the risk of a man made disaster? Through IGC, IUGS will inform science-based solutions to these and similar questions. Their findings and recommendations will shape future research, equip lawmakers to make informed decisions and this through tow sets of complementary recommendations:

- the first one for the scientific communities will lay the groundwork for further collaboration among geoscientists
- the second one for the general public, teachers and policymakers should present the recommendations so they become the useful tools that advance policy, research, education and activities.

(2) Global Geo-science Understanding and Developing Committee: the GGCUD will be a virtual hub for the wide-ranging work IUGS and many organizations do to enhance understanding and developing of the geo-sciences and strengthen the field itself. From workforce development that helps ensure IUGS has enough talented geo-scientists to meet the growing demand to research and education initiatives that hold geo-science programs to rigorous standards. The GGCUD will be the go-to source for scientists, educators, the public and the geo-science community worldwide. The GGCUD activity should include directory of geo-sciences organizations and of geo-sciences degree programs of excellence, besides scholarship and fellowship opportunities for dissemination of information on the global supply and demand for geo-scientists. This kind of service should improve and make broader worldwide the knowledge of the activity of IUGS, opening in the mean time the doors to new country members, associates etc, rising up the income. In fact, this new policy should encourage partnerships with philanthropic supporters, including corporations, foundations and individuals. Through their contributions IUGS will support new scientific and educational initiatives encouraging students to pursue their interests in the geo-scientists. In addition, providing science-based Information, IUGS should solidify the organization as credible, reliable source of knowledge and insight.

General benefits for IUGS donors, supporters and partners, in addition to those already in existence (especially for strategy 3, but not only)

- 1) Participation to ICSU's grants programs, joint projects with other ICSU unions
- 2) Financial: may qualify IUGS Grants programs and for support for travel to IGC meetings through the Hutchinson Fund and Geo-host.
- 3) Outreach: links to IUGS Website, free publicity in Episodes (?), participation in planning special symposia at IGC meeting, exposure through IUGS Annual Reports
- 4) Influence: representation through IUGS in International Council of Science (ICSU) of opinions on major scientific and societal issues; representation on IUGS Commission, Task group and Committees, thus increasing influence in global geo-scientific questions
- 5) Stronger ties with countries through IUGS links

In conclusion, for the future, the FC recommends to the next Financial Committee, beside a report present to the IUGS Council every four years before the election of a new EC, to make a proposal each year on the annual budget for the EC's consideration, advising in the mean time the EC on the management of funds and ways of improving the funding of the Union, reducing the expenses as has been done in the last years.

EXECUTIVE SUMMARY

According to the TOR by the IUGS Executive Committee (EC), the primary roles of the FC are to:

- 1) identify external financial opportunities for IUGS;
- 2) propose to the EC ways to improve IUGS financial operations, including the allocation of funds in relation to the strategic priorities and missions adopted by EC;
- 3) audit IUGS finances and present a report to the IUGS Council every four years has been proposed:

STRATEGY 1: Research projects and programs generated by the IUGS have responded mostly to the demand of universities and/or institutes of Academy of Sciences, being strongly oriented towards fundamental science. IUGS must recognize that scientific research during the last fifty years partly moved

from “curiosity driven” into “application driven”. As IUGS cannot generate an important amount of financial support directly from sponsors it must:

- (i) significantly enlarge its impact with respect to the mining exploration and production industry, to the industrial mineral and various environmental fields;
- (ii) create a network of scientific collaboration with private and/or public companies working in Earth Sciences;
- (iii) initiate seminars and/or specific scientific meetings, training courses and organize projects.

STRATEGY 2 (looking for donors):

- (i) IUGS should investigate the possibility of creating a Foundation to tap donations from individuals, agencies, private and public bodies and foundations. Donations could be driven towards specific events/items, as for example education, public awareness, etc.
- (ii) IUGS must identify and clearly communicate its unique role. Rather than have a generic donation fund
- (iii) IUGS might have funds and endowments designed to meet specific needs (i.e. student support, prize fund, Earth Science education, payment of developing countries IUGS fees, congress participation, conference + workshop fund, publication fund, general fund + a number of specific endowments bearing the donor’s name, and aimed to other specific goals). The tax immunity status may be of interest to US donors and probably to some other countries, but it is doubtful that non-US donors will give to IUGS.

STRATEGY 3 (looking for other sources):

- (i) investment of financial assets: since 2000 improvements in the return on IUGS investments accomplished. For the future other options can be explored
- (ii) royalties and Publication revenue: Episodes might become a source of funding instead of expenses if only it would be managed differently. It could be electronically produced and marketed with great savings
- (iii) the source of income that can be improved is the amount of money that GSL pays for books arising from IGC sessions. The past EC proposed that IUGS publish a series of books dedicated to thematic subjects: for example, the ten themes of the IYPE, etc
- (iv) increasing the number of Adhering Organizations and their category, Associates Members (private and public institutions)
- (v) IUGS could offer to inactive members the opportunity to pay the last year membership fees (and of course the future) in order to go back to Active members status. “It is a one time opportunity” to wave the backlog penalty.

STRATEGY 4 (developing a new policy to acquaint public and private institutions and scientific communities within IUGS, to increase the number of country members, stimulate participation of new partners, donors, associates to increase its knowledge and the funds): long term plans and advise in management fund:

The world use of natural resources often intersects in complex ways making it difficult to decide the best course of action. We need innovative solution to our planet’s most urgent questions, from the use of minerals and natural gas and the exploration of renewable energy. IUGS and IGC may contribute to do just that communicating findings and solutions to this issue to the public and policymakers:

(1) Making the vision reality.

with an appropriate investment over 4 years (the EC IUGS turn) IUGS can address today challenges and strengthen the public understanding science and education that will open up tomorrow’s opportunities. Scientists, either “curiosity driven” or “application driven”, must work together to develop scientific, finalized and applied research to answer several question of fundamental and applied research.

(2) Global Geo-science Understanding and Developing Committee:

- (i) the GGCUD will be a virtual hub for the wide-ranging work IUGS and many organizations do to enhance understanding and developing of the geo-sciences and strengthen the field itself. The GGCUD will be the go-to go source for scientist, educators, the public and the geo-science community worldwide

- (ii) the GGCUD activity should include directory of geo-sciences organizations and of geo-sciences degree programs of excellence, besides
- (iii) scholarship and fellowship opportunities for dissemination of information on the global supply and demand for geo-scientists
- (iv) this new policy should encourage partnerships with philanthropic supporters, including corporations, foundations and individuals;
- (v) through their contributions IUGS will support new scientific and educational initiatives encouraging students to pursue their interests in the geo-scientists.

General benefits for IUGS donors, supporters and partners, in addition to those already in existence (especially for strategy 3, but not only)

- 1) Participation to ICSU grants programs, joint projects with other ICSU unions
- 2) Financial: may qualify for the IUGS Grants programs and for travel support-to IGC meetings through the Hutchinson Fund and Geo-host
- 3) Outreach: links to IUGS Website, free publicity in Episodes (?), participation in planning special symposia at IGC meeting, exposure through IUGS Annual Reports
- 4) Influence: representation through IUGS in International Council of Science (ICSU) of opinions on major scientific and societal issues; representation on IUGS Commission, Task group and Committees, thus increasing influence in global geo-scientific questions
- 5) Stronger ties with other countries through IUGS links

Comments: Good report – I include someone from industry for the best strategies. Note that a paid subscription to *Episodes* fulfills the requirement as an Associate Member however this is not widely advertised. A few things need to be corrected and implemented into the final version which is due by April 1, to be approved by EC in Brisbane. Coordination with the Treasurer to be considered.

The Committee ACCEPTED the FC report.

- **ACTION ITEM # 6.** EC to send comments on the Finance Committee report to Chair Antonio BRAMBATI within next March so this can be integrated into a final report which is required in time for the 34th IGC.
- **ACTION ITEM # 7.** Finance Committee Chair Antonio BRAMBATI to produce a final document on IUGS financial matters for next April to be considered at the next Council meeting in August 2012.
- **ACTION ITEM # 8.** Finance Committee Chair Antonio BRAMBATI to coordinate with IUGS Treasurer William CAVAZZA an audit report of the IUGS quadrennial budget to be considered at the next Council meeting in August 2012.

5.a.5. Ad hoc Review Committee (ARCs) (Peter Bobrowsky)

Three ARC Reviews were completed and those were the ILP, COGE and INHIGEO. Arc Reviews that need to be scheduled include: TGGB, TGGW, GARS and IGCP.

The complete committee reviews will be available on the IUGS website.

- **ACTION ITEM # 39.** ARC of IGCP and GARS is required in the next few months (Chair William CAVAZZA and Secretary Jacques CHARVET).
- **ACTION ITEM # 40.** ARC of TGGGB is required in the next few months (Chair TANDON Sampat and Secretary Peter BOBROWSKY).

5.a.5.1 International Lithosphere Program (ILP) Ad-hoc Review
 – Rapporteur: Jacques Charvet

Background

IUGS asked IUGG to conduct a joint review of the IPL activities. It was agreed that each Union will have a review done in 2011 and then will compile a joint review by end of this year – beginning of 2012.

The IUGS review was made through an interview on January 18, 2011, at UNESCO, Miollis building, Paris. The participants were: Jacques Charvet, IUGS Vice-President (ARC Chair); William Cavazza, IUGS Treasurer (ARC Secretary); Laurent Jolivet, Professor, University of Orleans (ARC External Reviewer); Jaume Vergés, Researcher, CSIC, Barcelona (ARC External Reviewer) as ARC members; Sierd Cloetingh (Chair, ILP) and Roland Oberhänsli (Secretary General, ILP) for ILP.

To conduct an IUGG review of the ILP scientific/administrative/financial activities, on 1 September 2011 IUGG President Harsh Gupta appointed the following IUGG members to serve for the Ad-hoc Committee: Chen Yun-tai (China), IUGG Bureau Member, 2007-2011 (external reviewer); Alik Ismail-Zadeh (Germany/Russia), IUGG Secretary General (external reviewer, ex-officio); Kalachand Sain (India), IUGG liaison to ILP (internal reviewer). The IUGG review was based on the ILP reports (2007-2010) submitted by the ILP Secretary General to IUGG and on the ILP Terms of Reference. A draft report on the ILP review was sent to two prominent members of IUGG, who were involved in ILP activities: Bob Engdahl (USA) and Søren Gregersen (Denmark). The synthesis of both review reports was made electronically and is presented hereafter.

Comments

The ARC members acknowledged the important role played by the ILP in organising an active scientific debate on first-order scientific topics and stimulating the creation of successful international research groups. For the past four years the International Lithosphere Program (ILP) has been very active and successful in accomplishing its tasks following the guideline assigned by IUGS and IUGG. Despite a limited budget the ILP plays an essential role in structuring the scientific community.

The ILP has contributed immensely to unravel the scientific curiosity of what happened in the past and what is expected in future with special emphasis to the natural disaster and other solid earth processes. It has provided vital information starting from the shallow phenomena to deep interior of the earth through multidisciplinary research projects. The results that have been brought out under the ILP's initiatives are definitely useful to the geo-scientific communities for understanding the nature and dynamics of the lithosphere. In short, the outcome of ILP is significant, as evidenced by the publication of 800 research articles, 20 special volumes and 2 books covering various aspects on nature, dynamics, origin and evolution of the lithosphere through international, multidisciplinary geo-science research projects and coordinating committees. The prestigious geo-science journal *Tectonophysics* became ILP journal. ILP extensively involved founding and activities of the IYPE. These activities greatly increased the visibility of ILP.

Today's science is multi-disciplinary and multi-dimensional. ILP has brought out these through the activities of various task forces on volcanoes, geodynamics, baby plumes, paleo-seismology, sedimentary basins, LAB, accretionary systems, Himalayas, Andes, Topo-Europe, Topo-Central Asia, continental drilling etc. The success of TOPO-EUROPE or the Basin Task Force provides excellent examples that should inspire the leaders of the new Task Forces. Important scientific results were also obtained in the fields of "baby plumes" and ultra-high pressure geology. Even if it is sometimes difficult to decipher exactly which was the contribution of the ILP compared to other origins of funds in those successful achievements, the seed money provided by ILP appears to be essential.

Also important is the work done by putting together geoscientists of the western European countries with geoscientists coming from developing countries. There lies a scope for the earth scientists to participate in the International lithosphere program. The earth scientists from developing countries can propose a multi-disciplinary scientific program of a specific interest related to a region in terms of earthquakes, volcanoes, tsunamis etc.

The activities of the ILP showed that the ILP has been keeping fine balance between "addressing societal needs" and "satisfying scientific curiosity". The fact that the ILP obtained support financially not only from IUGS and IUGG, but also other sources may be seen as an indicator.

Recommendations

- An improvement of the Annual Report is needed, including (i) more detail on the quantitative evaluation of the scientific output of program, (ii) specifics on the use of IUGS-IUGG funds only for organizational purposes, (iii) detail on the amount of funding raised from other sources, (iv) more detailed reports on the scientific achievements of the various Task Forces, (v) emphasis on the links between specialities, (vi) responsibility of the chair person of a Task Force for providing a one page report on the main scientific results.
- A better integration between IGCP, especially within the theme “Deep Earth”, and ILP should be pursued.
- Four of the 8 International Associations of IUGG are involved in studies of the lithosphere
- Yeaosphere, namely, IAG (geodesy), IASPEI (seismology), IAVCEI (volcanology), and part of IAGA (geomagnetism). Closer link between the ILP projects and various scientific commissions of the IUGG Associations should be encouraged by ILP.
- Since the shallow phenomena and deeper processes at various levels of the crust and the upper mantle are linked, ILP should encourage both shallow and deep studies of the lithosphere. ILP should encourage research on understanding the lithosphere and asthenosphere interactions and their interaction with the mesosphere.
- The ILP activities in Asia and the Pacific region, in Latin America and the Caribbean, and in Africa should be strengthened.
- The ILP can support workshops/seminars to be organized locally or nationally by an institute or science academy with specific objectives for a bigger participation of earth scientists from a region, particularly from developing countries. ILP can also support international workshops, through which important results of a scientific expedition or drilling on continents or in oceans can be shared.
- At each general assembly of IUGG, as well as during the IGCs, a 'Young Scientists Event' can be organized by ILP with an appropriate and relevant theme to attract geoscientists. This would provide a platform of interaction between the young and experienced colleagues for the betterment of Geo-science and Society.
- Under the umbrella of ILP, a number of lectures can be arranged nationally through a National Representative of ILP or Science Academy for popularizing the lithospheric studies (most relevant to societal needs) with a view to understand the 'mysteries of the Earth' and to build a safer and healthier society.
- Administrative matter. There should be some overlap of services of President and Secretary General for the smooth functioning and elevating the level of ILP.
- Financial matter. IUGG suggests ILP to send annually a financial report to IUGS and IUGG. This will improve a transparency in the use of funds by ILP. The financial conditions of ILP can be improved also by (a) establishing new National Committees and/or (b) increasing the support from established National committees.

The Committee ACCEPTED the ARC report on ILP, which will be published in *Episodes*.

5.a.5.2. COGE Ad-hoc Review- Rapporteur: Wesley Hill

The Report on the Ad hoc Review of the Education, Training and Technology Transfer (COGE) was presented by Councilor Wesley Hill.

The Draft COGE ARC Report was received by COGE on 16 November 2011, for review and comment by the full Commission. It was circulated on 17 November 2011 to all COGE members, following previous procedures, using an online wiki. The following subjects were stressed by the Commission members. There were some discussion regarding: 1) the comparison of the original IUGS guidelines versus the new set of guidelines, and 2) the significance of clearly defining our goals, identifying limited and focussed areas of activities, and highlighting that “if there is one region that needs attention to promote earth science education, it is AFRICA”.

There were specific comments made which are available on the IUGS website.

COGE acknowledged the excellent work carried out by the IUGS Ad Hoc Review Committee, appreciating its effort to make the final conclusions and recommendations supporting COGE, as well as the 13 Action Items Agreed During the ARC Review, that COGE will try to perform. .

5.a.5.3 International Commission on the History of geological Sciences (INHIGEO) Ad-Hoc Review – Rapporteur: Colin Simpson

Ad hoc Review Committee Members:

Peter BOBROWSKY – IUGS Secretary General (ARC Chair)
Colin SIMPSON – IUGS Councillor (ARC Secretary)
Niichi NISHIWAKI (Faculty of Social Research, Nara University)
Hisashi NIREI (The Geo-pollution Control Agency, Japan, Member of IUGS-GEM Commission)

INHIGEO Member Participants:

Silvia FIGUEIRÔA (President)
Barry COOPER (Secretary General)
David OLDROYD (Vice-President Australasia/Oceania)
David BRANAGAN (Past President, 1992-1996)

1. Rationale for the Review

The International Commission on the History of Geological Sciences, (INHIGEO), was formally established at an IUGS meeting in Yerevan, Armenia, in 1967, following an earlier proposal made at the 22nd International Geological Congress in New Delhi in 1964. The chief goal of the Commission has been, and remains, the ongoing promotion of international co-operation in the study of the history of the geological sciences. The Commission also works to foster the publication of individual and collective works that illuminate the history of the geological sciences. It is also affiliated with the International Union of the History and Philosophy of Science (IUHPS).

As specified in the Statutes and Byelaws of the Union, the IUGS Executive Committee is required to undertake a formal review of all Commissions, and other bodies funded by the Union, approximately every four years. These reports provide accountability for the expenditures incurred by the Union. Consequently, during the Annual Meeting of the IUGS Executive Committee in February 2011 a decision was made that INHIGEO should be reviewed within the next year. An ARC was established comprising two Executive Committee members: Peter BOBROWSKY (as Chair) and Colin SIMPSON (as Secretary), plus two external reviewers: Niichi NISHIWAKI and Hisashi NIREI. The INHIGEO Secretary General, Barry COOPER, was duly notified of the forthcoming review requirement and the INHIGEO Board was provided with all relevant documentation regarding the review process (e.g. ARC guidelines) prior to the review itself.

The ARC Chair and Secretary compiled as much background information as possible regarding the past activities of INHIGEO. The INHIGEO Secretary-General also provided the Committee with relevant background information on INHIGEO activities, specifically briefing papers, totalling 46 pages, as well as other documents. The Review Committee members also referred to the INHIGEO website at www.inhigeo.org/.

2. Information to be considered

At the start of the review process in Toyohashi, Japan, the ARC Chair, Peter BOBROWSKY, presented information on the protocols and reasons for such routine IUGS reviews of Commissions as required per the IUGS Statutes and Byelaws, and the Terms of Reference (TOR) of IUGS *ad hoc* review committees (this information was sent to INHIGEO prior to the Review). He also outlined the “Report of IUGS Commission 8 on IUGS Rules for Commissions, Task Groups, and Projects”. The ARC Secretary, Colin SIMPSON, discussed the types of issues normally addressed during such reviews, and the overall

process that would be followed during the review.

3. Summary of the interviews with INHIGEO Review participants

The ARC addressed a range of general items, topics and issues relevant to all IUGS Commissions, but also addressed particular items uniquely relevant to INHIGEO:

The Review focused on the following items:

- progress relative to the original planned activities over the past 4 years;
- successful items, events, products and activities in the Commission;
- main problems encountered by the Commission;
- financial situation of the Commission;
- relationships with the IUGS and other international bodies; and
- proposed Action Plan for 2012-2016.

ARC's Comments

During the review the ARC Members made comments/suggestions aimed at improving INHIGEO activities. These included:

- Although INHIGEO is serving its Members well, it could significantly broaden its activities to become much better recognised outside of the INHIGEO membership and throughout the world.
- The Statutes & Bylaws are long overdue for a revision that allows for improved and increased activity in relation to membership (including membership from developing countries) and in relation to ongoing operations.
- Membership could be changed to be more open and flexible thus allowing anyone with an interest to become a member while the Commission still retains control of membership through an election process. Improved regulations are also needed in relation to the requirements for election to the INHIGEO Board.
- Consideration could be given to allowing non-active members to continue rather than 'deleting' them - such continuing links may assist external information dissemination.
- New possibilities for raising funds should be introduced - for example possibly charging a \$10 annual membership fee (dependant on different countries' financial status) (on current membership figures this would add an additional \$US2000+ per year).
- Consideration could be given to using any profits from annual meeting registration fees to provide a "Student's fund" for assisting travel etc to annual meetings etc.
- New mechanisms for promoting INHIGEO worldwide should be introduced.
- Significantly update and broaden the website to provide more information on INHIGEO activities (such as providing access to all back issues of newsletters online; providing active links to all INHIGEO articles in the *Episodes* issues available on the IUGS website, adding summaries of other relevant publications, listing the best textbooks on the subject for the benefit of students).
- Consider using the IUGS website as a template (available for about \$200) to develop, and easily update, a new INHIGEO website.
- Utilise web technology such as web-based internal communication platforms to improve internal communications, but provide alternatives for those members with limited access to the internet (e.g. many in Africa).
- Consider the possibility of smaller news circulars with greater frequency than the existing newsletter (thus providing more timely information) to be distributed by email where possible.
- Need to clearly identify the advantages of INHIGEO membership and distribute a fact sheet extensively as part of a recruitment strategy.
- Consider applying for an International Council for Science (ICSU) grant to obtain additional funds. Also consider the possibility of initiating an International Geoscience Programme (IGCP) project.
- If the suggested activities lead to an increase in membership, INHIGEO should consider the possibility of forming an International Association or "Academy" to expand international activity in the history of geological sciences. It is recognised that this may complement the existing "History of Earth Sciences Society", based primarily in the United States, as well as several national

groups including Australia, China, France, Germany, Japan, Spain, United Kingdom and United States.

4. **Conclusions and Recommendations**

Since its formation in 1967 INHIGEO has been a dedicated and active group which has been able to produce publications about the history of the geological sciences as researched by their members, which would not have been possible without formation of the Commission. The ARC recognizes and commends these noteworthy achievements by all members of the Commission. Unlike most IUGS International Commissions and Task Groups, which have been established to address specific scientific issues, and which have succinct periods of operation, INHIGEO has an ongoing task whether operating under IUGS or independently.

Based on this review the ARC Committee recommends the following:

1. INHIGEO should immediately review and update its Statutes & Bylaws to allow improved management of identified problems and restrictions.
2. INHIGEO needs to develop, and implement, effective strategies for both the Commission's communications, and for Membership recruitment.
3. INHIGEO must demonstrably improve the regularity and effectiveness of its communications (including rebuilding and populating the website) with the IUGS Executive Committee and other IUGS Commissions/organizations/bodies where relevant.
4. The INHIGEO ARC recommends the IUGS Executive Committee continue to support INHIGEO until the next IGC in 2012.
5. The INHIGEO ARC recommends conditional extension of INHIGEO for one extraordinary additional term of 4 years until 2016 following satisfactory progress in dealing with points 1, 2 and 3 before the IGC in 2012.

The IUGS Executive Committee members offer special thanks to Prof. Hisashi NIREI and Prof. Niichi NISHIWAKI for their assistance on the Review Committee.

The Committee ACCEPTED the ARC report on INHIGEO

5.a.6. Proposals for new IUGS Committees No proposals received.

5.b. COMMISSIONS

5.b.1. International Commission on Stratigraphy (ICS)

Rapporteur: Stan Finney

S. Finney reported on the ICS activities and a written report was submitted to the Ssecretariat.

Fololwing the report the following questions were raised and responses were received:

- How many hits were made to the ICS website? There is counter on website, ICS is considering a move to a more secure server.
- Why isn't the IUGS logo on the ICS website? Stan will look into that.
- When will the ICS award proposal for the IUGS Science Excellence Award will be received? It is due by April 1.

The Committee ACCEPTED the ICS report

- **ACTION ITEM # 57.** Letter from President Alberto RICCARDI to the ICS will indicate that the allotted increase in funding for this fiscal is a one time increase to coincide with the IGC.

5.b.2. Education, Training and Technology Transfer (COGE) **Rapporteur: Wesley Hill**

2011 Activities/Accomplishments:

COGE main partners to date are IGEO, AGID, and International Earth Science Olympiad (IESO).

- COGE and IGEO advertised and supported the International Earth Science Olympiad (IESO) which has run successfully since 2007 and enters its fifth year (was in Italy 2011).
- Partnership with AGID, in the development of Geoethics, and its links with geoscience education, taking part in the final edition of the International Declaration on Geoethics.
- COGE established new contacts with AGID, GSAf, CIFEG, UNESCO and other institutions (e.g. NSF-ESLI, UNCSTD, AGN, AAWG), mainly focused on the launch of an initiative related with geoscience education in Africa to establish a Geoscience Education Roadmap for Africa.
- COGE has established new contacts with IAGD, especially related to students and professionals with disabilities worldwide regarding geoscience education, training and technology transfer.
- New website since February 2011 (www.iugscoge.com)
- Nominated Professor Nir Orion (Israel) as recipient of the IUGS Award for Geoscience Education
- Accomplishing the Action Items defined by the IUGS Ad Hoc Review ARC (2011)

2012 Activities Planned:

- a. Continue accomplishing recommended ARC Actions Items
- b. Collaboration with IGEO
- c. Collaboration with AGID on Geoethics and Geoscience Education
- d. Begin initiative: GEO Education Roadmap for Africa, GEO-ERA, advertising and distribution of a questionnaire
- e. Begin new IAGD/COGE project, developing an instructional workshop related to students and professionals with disabilities
- f. IGC Brisbane Symposium Geoscience Education: Geoscience for Society
- g. COGE business meeting during IGC Brisbane
- h. Participate in the IUGS EC Meeting in San Sebastian, Spain 2012
- i. Participate in the Earth Science Education Event during the 40th Anniversary IGCP in Paris

Commission Issues/Road-blocks:

- Coordinating skills and experiences of old and new Commission members (past and present activities carried out by the Commission);
- To explore new ways to strengthen the Commission and launch new ideas/initiatives;
- To create new synergies on capacity building in primary, secondary and tertiary education;
- To improve COGE visibility and international recognition;
- To become a global reference on geoscience education.

In September 2011, an IUGS Ad-hoc Review (ARC) was held in Madrid, Spain to review the activities of the Commission. The ARC Committee recommended that IUGS should continue to support COGE based

on performing the 13 defined Actions Items.

Budget:

2011:

COGE received \$3500 USD from IUGS for expenditures 2011.

2011 Expenditures: \$1779 (admin website/telecom). \$1694 remaining funds from 2011.

2012 Request:

Website maintenance \$2400

Support current COGE-IGEO activities \$1500

Begin COGE initiative (GEO Education Roadmap for Africa, GEO-ERA): \$1500

Begin the IAGD/COGE project: \$1200

Commission administration: \$350

Total 2012 Activities: (\$ 6,950 - \$1,694 remaining 2011) **\$ 5,300 USD requested for 2012**

New COGE Project Proposal 2012-2013 – Request for Formal IUGS Endorsement

New COGE education project proposal: *Promoting School-level Geoscience Education Across Africa – a joint proposal by UNESCO, IUGS-COGE and IGEO*. A full copy of the proposal is attached, which has been developed by UNESCO, COGE, and IGEO working together in support of UNESCO's Earth Science Education Initiative in Africa. The focus of the proposal involves week-long 'launch-pad symposium', which will invite teams of representatives from all African countries who are able to participate. The objective of the symposium will be to share African educational scenarios and worldwide 'success stories' early in the week, then each team will develop a 'geoscience school-level education plan' for their own countries to be run and monitored in the succeeding years. A key part of the plan involves the African teams developing school-level geoscience educational solutions for their own countries, based on their own experience and expertise, with support provided by UNESCO, COGE, and IGEO who have experience with such initiatives.

The project will be led by Professor Chris King, proposed Vice-Chair of IUGS-COGE and past-Chair of IGEO and who is working to find funding for the symposium. At this point, there is a need for each of the organizations to formally endorse this project initiative. Endorsement will help support funding and grant support from outside organizations.

COGE Commissioners have offered their support, along with IGEO. UNESCO is also sounding enthusiastic and further discussions will take place around the project at the IGCP 40th Anniversary Event in Paris in February.

Therefore, COGE is asking the IUGS Executive Committee to endorse the outline of the project formally by providing written support, so that it can be used in development of a funding bid.

**IUGS Commission on Geoscience Education, Training & Technology Transfer (COGE)
Commission 5 Year Action Plan 2012-2016**

This action plan will be undertaken in association with members and other agencies including, but not limited to those listed in the Terms of Reference for this Commission, as well as following: a) the indications of the IUGS Executive Committee (see 2010 Annual Report), the 13 Actions recently (29 September 2011) recommended by the IUGS Ad-hoc Review Committee recommendations; b) the ordinary and ongoing collaborations and c) the new COGE initiatives and projects.

Over the life of this Commission, it will:

1. Open the COGE field of influence, acting as point of reference on geosciences education, training and technology transfer for the IUGS bodies and other associate and affiliate institutions and organizations worldwide.
2. Consolidate the effects produced on COGE after accomplishing the ARC recommendations

3. Keep and potentiate the ongoing and successful cooperation with IGEO and AGID on geoeducation and geoethics, respectively.
4. Promote and develop as a new initiative, the building of a Geoscience Education Roadmap for Africa (GEO-ERA).
5. Develop and maintain contact and collaboration with other associations and agencies involved in earth science education and outreach activities with the aim of carrying out joint initiatives, organizing workshops, seminars and other actions.
6. Develop and operate the new COGE website for the dissemination of materials to the wider community, also using the social networking benefits for specific public outreach issues.
7. Collaborate with representatives of interested countries to develop, implement and support country-specific benchmark strategy documents that can be used to establish earth science education and outreach programs.
8. Attract the participation in the Commission of experts on training and technology transfer.
9. Assist in the distribution of materials associated with teacher training sessions and make these materials available to other agencies and organisations for inclusion in the development of their own teacher training programmes.
10. Arrange working groups and theme/activity coordinators from COGE members.
11. Examine additional funding possibilities and suitable models for operating training sessions on effective strategies for introducing earth science education and outreach activities in developing countries.
12. Explore the translation of teaching materials into the languages of targeted countries, as appropriate.
13. Explore the training of local educators to develop materials that are relevant and sensitive to the teaching, cultural, language and geological conditions of that country.

The EC considers that COGE should be congratulated for an excellent job and that it is moving in the correct direction. It should start out with the new proposed initiatives. It is also noted that budget is small compared with the amount of work involved.

The Committee ACCEPTED COGE's report

- **ACTION ITEM # 41.** President Alberto RICCARDI to inform COGE ratification of COGE Vice-Chair

5.b.3. Management and Application of Geoscience Information (CGI) -

Rapporteur: Colin Simpson

The CGI is a very active and productive Commission. The CGI continues to develop Geoscience ML (GeoSciML), a markup-up language allowing the digital exchange of geoscience information locally, continentally and globally. Both, the linked global OneGeology project and the European EC project OneGeology-Europe are using GeoSciML to make geological data interoperable and accessible via their web portals. The CGI is also hosting Earth Resource ML which is a mark-up language to exchange mineral and energy resources information.

2011 CHIEF ACCOMPLISHMENTS AND PRODUCTS

During 2011 it conducted workshops in various countries. Globally CGI, through its Working groups and members, deliver GeoSciML, the "interoperability engine" that powers OneGeology. OneGeology is a

project tightly linked to CGI; it made progress on several fronts in 2011: 117 nations are now participating, data services are increasing in number and sophistication.

CGI Workshops

Africa (2 workshops (Johannesburg, Dar es Salaam);

Asia (Japan , Indonesia, China). The planned Thailand workshop had to be cancelled due to severe flooding):

South America (3 different training courses were prepared but due to circumstances beyond the control of the organisers only the Argentina course was held. The main problem in South America is that despite many successful activities communication between professionals from different countries is still not easy (a problem which has different causes).

Oceania - Over 150 people from more than 50 organisations (government agencies and departments, research organisations, industry and university) attended a 3 day workshop.

Europe - Following the successful conclusion of the OneGeology-Europe project that has adopted and implemented the GeoSciML standard, EuroGeoSurveys (the Association of European Geological Surveys), together with the National Geological Surveys, have committed themselves to maintain the OneGeology-Europe infrastructure and to build and develop the European Geological Database Infrastructure, extending the OneGeology-Europe foundation.

An overarching problem for CGI in the global context is the issue of lack of IUGS funding for travel and thus reliance on national budgets that are under increasing pressure. This has limited CGI progress. It is a problem that is being exacerbated because national priorities are seemingly increasingly domestic. The Multilingual Thesaurus has not progressed as planned because of a difficult mix of different views on strategies and political and personal issues within the groups and individuals involved.

CODATA - CGI continues to represent the IUGS at the CODATA General Assembly though delegate John Broome. The evolution and acceptance of the GeoSciML standards and its demonstration through the OneGeology initiative has led to the IUGS and CGI being recognized in the CODATA community as union leaders in data management leadership. Discussions resulted in the decision to pursue ICSU funding through a grant proposal to build upon best practices identified at the session and share this knowledge within the ICSU community. A proposal was submitted entitled "*Harmonization of Scientific Data Standards within the ICSU Community*". IUGS was one of the endorsing unions for the proposal but unfortunately the proposal was not funded. Some of the proposed work will proceed but at a much slower rate.

The major aims of CGI for 2012 are:

- Continue GeoSciML and Earth Resource ML development, ensuring consistency between INSPIRE data specifications, or other regional developments and CGI standards.
- Formalise the relationship between IUGS and The Open Geospatial Consortium (OGC) with the objective of making GeoSciML an OGC standard.
- Make the ISC stratigraphic chart web accessible.
- Prepare the participation of CGI in a geoinformation meeting in South America.
- Hold the postponed Asian CGI outreach workshop in mid-February in Thailand.
- Prepare for the Geoinformation Supersession at the IGC2012 in Brisbane.
- Manage the CGI election of a new Council and officers at the IGC in August 2012 and provide a sound base for the continuation of the CGI activities after the change of the Council. (This will be the most important critical milestone for CGI)

CGI Council anticipates a similar budget to that provided by IUGS in previous years.

CGI SUGGESTIONS FOR IMPROVEMENT OF IUGS ACTIVITIES, ESPECIALLY IN REFERENCE TO ACTIVITIES OF IUGS BODIES.

Understandably, given the remit of our Commission, we would urge the IUGS Executive to give greater prominence in terms of discussion time, publication space and funding, to the area of geoscience

information and especially digital standards. In a world which is increasingly data and IT driven and dependent, it is imperative that the IUGS takes a lead in pushing forward digital advances and ensuring consistency of approach in geoscience data content and applications. Without this, holistic solutions to transnational geological challenges will be that much more difficult to deliver. We believe there is a need for geoscience information expertise to be present at the highest level in IUGS, i.e. a member of the Executive; if necessary by co-option.

The Committee ACCEPTED the CGI report.

5.b.4 History of Geological Sciences (INHIGEO)

5.b.4.1 International Commission on the History of Geological Sciences (INHIGEO) Annual Report –

Rapporteur: Alberto Riccardi

INHIGEO established by the IUGS and affiliated with the International Union on the History and Philosophy of Science (IUHPS) has 232 members from 47 countries.

Publication productivity in 2011 remained high with the publication of the proceedings of the 2010 INHIGEO conference held in Madrid-Almaden, Spain, under the History of Research in Mineral Resources (Ortiz J.E. et. Al. editors Cuadernos del Museo Geominero. 13. Instituto Geologico y Minero de Espana 405 pp).

The annual INHIGEO Newsletter has continued for 2011 as a substantial publication with 139 pages, including reports on historical research in different countries and was also circulated in pdf format as well as in hard copy.

The 2011 INHIGEO Symposium 36 was held in Toyohashi, Japan (2-10 August) with sessions dedicated to “History of Geological maps and Related Geological Images in the World”, “History of Seismology, Volcanology and Geotectonics” and General Contributions to history of Earth sciences. During the meeting an IUGS ARC undertook a review of INHIGEO

For 2012 INHIGEO is expecting the approval of the new version of its Terms of Reference and Bye-Laws, and is preparing a ballot for incorporation of new members, the editing of Newsletter 44, the nomination for inaugural “Vladimir V. Tikhomirov IUGS History of Geology Award” at the IGC, editing of the conference volume emanating from INHIGEO’s Annual Conference in Japan, planning 6 symposia at the 34th IGC (Biographical studies of eminent geologists: A symposium in honour of D.F. Branagan; The early history of continental drift: A centenary tribute to Alfred Wegner, Major achievements in 20th century geology; Geology in tropical regions; Geologists, resource exploration and development; General contributions in the history of geology), electing the new INHIGEO Board, revamping INHIGEO website, and addressing the recommendations of the IUGS ARC.

For 2011 INHIGEO expenses were \$ 9,273, and received \$ 4,500 from IUGS. For 2012 there is a request that the same annual grant be maintained, plus an unspecified amount to support the development of a new website.

Recommendation: This active and productive commission should be supported as requested. The new Terms of Reference and Bye-Laws have been submitted for approval by the IUGS EC.

The Committee ACCEPTED INHIGEO’s report.

5.b.4.2 INHIGEO Terms of Reference and Bye-Laws

INTERNATIONAL COMMISSION ON THE HISTORY OF GEOLOGICAL SCIENCES (INHIGEO)

TERMS OF REFERENCE

OBJECTIVES

The primary objective of the International Commission on the History of Geological Sciences (INHIGEO) involves the promotion of studies on the history of geological disciplines in an international context. In so doing, INHIGEO endeavours to promote and co-ordinate the activities of regional, national, and international organisations having shared purposes. INHIGEO also works to foster the publication of individual or collective works that illuminate the history of the geological sciences and to maintain an information-rich website.

STRATEGIES

- Meet regularly, usually once a year, and every four years with the International Geological Congress (IGC), to conduct a major symposium on the history of geology. This typically includes a multi-day field component. Associated with these activities are the publication of abstract volumes and excursion or other guidebooks.
- Work with various publishing houses and journals, and where appropriate in co-ordination with the IUGS, to promote the publication of symposia proceedings and a variety of contributions relevant to the history of geological sciences.
- Publish the annual *INHIGEO Newsletter* that incorporates information from the Officers and Members, national reports, book reviews, conference reports, interviews, obituaries, short historical research papers, and a variety of news items and illustrations that promote the sharing of professional insights.
- Provide regular information by email circulars to the INHIGEO membership dealing with issues of immediate relevance to the Commission and to the study of the history of the geological sciences.
- Develop and maintain an internet website that provides up-to-date information on the Commission's activities as well as other information that will be of interest to INHIGEO Members and the wider public.
- Liaise with IUGS to enhance the recognition of outstanding geologists via its "Scientific Awards of Excellence", and specifically with the "Vladimir V. Tikhomirov History of Geology Award".
- Contribute to *Episodes* on historical matters, for example by recording the history of past IGC meetings and other IUGS activities, by promoting knowledge of classic works in geology, and by furnishing reviews of books on the history of geological sciences.

BY-LAWS

1. INHIGEO is a Commission of the International Union of Geological Sciences (IUGS). It is also affiliated with the International Union of the History and Philosophy of Sciences (IUHPS).
2. INHIGEO is therefore bound by the IUGS Statutes and the IUGS By-Laws for Commissions.

3. The task of INHIGEO is to promote studies in the history of geological sciences and to stimulate and co-ordinate the activities of national and regional organizations that have the same purpose. It does so by promoting the holding of national, regional, and international symposia, by the publication of individual and collective works on the history of geological sciences, and by the maintenance of an informative website.
4. Reports on the work performed by INHIGEO, and its Members, and its plans and budget for the following year are to be submitted annually to the IUGS at a date designated by the IUGS Secretary-General. Similar reports are submitted to the IUHPS.

Structure

- 5a. A primary objective of INHIGEO is to establish an international network of scholars with active representation from as many countries as possible, and where possible having a diverse age range amongst its Members. INHIGEO specifically encourages the formation of national and regional groups.
- 5b. INHIGEO Members consist of scientists, historians and other scholars known for their publications and/or other activities in the field of the history of geological sciences.
- 5c. INHIGEO Honorary Senior Members are proposed by the INHIGEO Board from amongst the extant INHIGEO membership, in recognition of their significant contributions to the field of the history of geological sciences and/or to INHIGEO. Proposals shall require the endorsement of the INHIGEO members present at a subsequent INHIGEO Business Meeting.
- 5d. Individuals, who have a *bone fide* interest in the work of the Commission, but are not otherwise qualified for membership, may be nominated for approval by the INHIGEO Board as Associate Members. Associate Members cannot hold office, make nominations or participate in ballots, but in other respects have the advantages of INHIGEO membership. Over time, Associate Members are encouraged to qualify for and convert to full INHIGEO membership. Applications for Associate Membership of INHIGEO are especially encouraged from countries with minor scholarly communities.
- 5e. The INHIGEO Board consists of the President, regional Vice Presidents, Secretary-General, Editor, and Past President, with the Past Secretary-General having an *ex officio* role. Board membership should circulate within regions and to different countries as much as possible. The major regions, to be represented, when possible, are: North America, Latin America (South America, Central America and the Caribbean), Europe, Asia, Australasia and Oceania, and Africa. Board candidates are proposed by current Board members and elected by INHIGEO Members, subject to their approval by the IUGS Executive Committee and ratification by the IUGS Council. Any INHIGEO Member can also nominate another Member or other Members for membership of the INHIGEO Board when nominations are called by the Secretary-General. If there is more than one nomination for any position then the Secretary-General will organise an email ballot to determine Board membership. The President and other members of the Board remain in office until the next session of the IUGS Council and are eligible for re-election once only (or twice if their initial appointment was made between the years of the installation of IUGS Councils). The maximum term of office is therefore eight years under normal circumstances. Any casual vacancies on the Board will be filled by the residual Board with ratification by the INHIGEO membership at the earliest opportunity.
- 5f. Prospective members of INHIGEO shall normally be nominated by at least one INHIGEO member and supported by one Member of the INHIGEO Board, or by a national committee of geology or history of science. Nominations will be reviewed by the INHIGEO Board, the decisions of which will be conveyed to the INHIGEO Members present at the subsequent INHIGEO Business Meeting and will be announced in the Commission's subsequent correspondence to Members. Where appropriate, Associate, rather than Full Membership, may be proposed by the

Board. If a person wishing to join INHIGEO is not acquainted with any INHIGEO Board Member, a Membership application may be made directly to the Secretary-General who will determine Board support and reach a decision accordingly.

- 5g INHIGEO membership is ongoing, provided that participation in INHIGEO activities continues. Every four years (during the term of an elected Board) all Members, other than Honorary Senior Members, shall be asked whether they wish to continue their INHIGEO membership. Failure to respond will normally result in cancellation of membership. Activities contrary to the Objectives and Strategies of INHIGEO may also result in termination of INHIGEO membership.

Functions

6. The INHIGEO Board directs the activities of the Commission. The President may delegate his or her powers to one of the Vice Presidents by mutual agreement. The President and the Secretary-General divide the management of organisational and financial matters between themselves.
7. The INHIGEO Board distributes information to Members by means of regular emails and an annual Newsletter in English.
8. INHIGEO Business Meetings are held at the time of the meetings of the International Geological Congress, in order:
 - a. to discuss reports on the work of INHIGEO and to consider plans for the next term;
 - b. to finalise Board membership for confirmation by the IUGS Council; and
 - c. to carry on any other Commission business that may come before the meeting.
9. INHIGEO Business Meetings can also be convened at any other time by decision of the Board. They shall normally be held at the annual INHIGEO conferences.
10. INHIGEO Board Meetings may be convened at any time as decided by the Board. It is anticipated that day-to-day matters will be regularly discussed by the Board, via email correspondence, given the world-wide dispersion of Board Members.
11. At INHIGEO Business Meetings each Member present (but not including Associate Members), including members of the Board, has a vote. A motion is considered passed if it receives a simple majority of the affirmative votes cast at the meeting.
12. The INHIGEO Board is responsible for recommending to the IUGS a recipient for the "Vladimir V. Tikhomirov History of Geology Award" every four years, during the first quarter of the year corresponding to an IGC. At this time, the INHIGEO Board shall communicate its nomination to the IUGS Board, for presentation by the IUGS President during the opening ceremony of the IGC.

Approved by the INHIGEO Board19 January 2012

Approved by the IUGS Executive Committee..... (Date)

Approved by the IUGS Council (Date)

As a consequence of the ad hoc Review of INHIGEO that was held in Toyohashi, Japan last August, the subsequent report recommended that the INHIGEO Terms of Reference and By Laws should be revised and updated.

This recommendation was taken to the INHIGEO Business Meeting that was held a few days after the ad hoc Review meeting. That Business Meeting then endorsed the ad hoc review Committee's recommendations and asked that the INHIGEO Secretary General draft revised Terms of Reference and By Laws for consideration as soon as possible by the INHIGEO Board and preferably by end 2011.

Draft revised By Laws and Terms of References were produced by the INHIGEO Secretary General in December 2011, as requested, and an in depth assessment and revision of the draft followed with extensive INHIGEO Board discussions.

As a consequence of these discussions, the revised INHIGEO Terms of References and By Laws are here attached for final endorsement by the IUGS Executive at the February 2012 meeting in San Sebastian, Spain with subsequent forwarding to the IUGS Council.

Such procedures are required both by INHIGEO's existing Terms of References and By Laws as well in the newly revised document.

In this document several important changes have been made including ...

- Introduction of the category of Associate Membership of INHIGEO
- Improvements to the INHIGEO Membership Nomination procedure
- Reference to the "Vladimir V. Tikhomirov History of Geology Award"
- Recognition of email communications and the INHIGEO website
- Careful rewording throughout

Presuming that these revised INHIGEO Terms of Reference and By Laws are approved, the INHIGEO Board will publish them in full in the coming INHIGEO Newsletter, due for issue in June 2012, so that full details are available to all INHIGEO members.}

The EC approved the revised Terms of Reference of INHIGEO.

- **ACTION ITEM # 9.** President Albert RICCARDI to inform INHIGEO that their revised Terms of Reference have been approved by the EC.

5.b.5 Tectonics and Structural Geology (TecTask) Rapporteur: Jacques Charvet

In 2011, the board was completed with the appointment of 7 more officers, leading to a total of 15 officers; two of them should join the Executive Committee of 4 people. The nomination of junior officers is still underway, with the consideration of 3 candidates by the executive committee.

Main achievements in 2011 concern:

- The development of the project "Glacierwatch" aiming to:
 - o identify and select areas worldwide of recent exposure of relevant structures at the front of glaciers,
 - o promote the formation of research groups for studying these unique outcrops
 - o develop an efficient protocol for quantitative mapping through the interaction between different research groups, coordinated through Glacier Watch.
 - o select easily accessible areas that can provide natural laboratories for teaching structural geology thanks to the unique exposure of structures.

The Neves area, in the Eastern Italian Alps, is an example which has already hosted several international excursions and summer schools.

Glacier Watch is lead by two TecTask officers, appointed in 2011: Neil Mancktelow and Giorgio Pennacchioni.

- The growth of Outcropedia project, a public database, on the web, of all important and beautiful tectonic (and other) outcrops in the World; with the double aim to make outcrops in unfamiliar places accessible to other geologists and to increase protection of the geological heritage. A new feature is being settled, i.e. a blog site, hoped to be operating in the spring of 2012. Newer features, such as adding 3D are envisaged.

- The support of 3 major scientific meetings, including one Penrose Conference.

TecTask has interactions with other international projects, in Western Africa, through training and support for the regional resource industry, with the Geo-Heritage projects in Spain and UK, with the IGCP project on geohazards and ancient societies, with the NSF projects on Geoinformatics and Geoscience Education.

TecTask is committed to the 34th IGC with at least 3 sessions. Two sessions will be convened by TecTask officers. 3 Displays (posters and handouts) are planned at the IUGS booth: overview on TecTask projects, Outcropedia, and Glacier Watch.

The review of major accomplishments over last 5 years is quite impressive, as the growth of the Commission which has now about 2000 members.

For the next year, the anticipated results concern a significant participation in the IGC, an effort towards developing countries in Asia and Africa, the implementation of field workshops in India and Iraq, the increase of the internet presence.

The mid- to long term goals include: emerging topics in Earth and Planetary Sciences (planetary and impact tectonics), stimulation of a better distribution of structural geologists, terminology standardisation, new structural softwares.

A critical milestone in 2012 will be the election of a new executive committee during the 34th IGC, with a generation change and a demographic shift of officers towards a wider international audience. But, at the end of 2011 TecTask was facing a problem: the call for nomination of candidates had very limited response; practically no qualified candidate with distinguished international scientific reputation has been nominated to replace the Chair of the commission.

Another problem regarding the funds; the events sponsored by TecTask are usually supported by additional external funding; but direct financial support for the commission is difficult to achieve due to national fiscal constraints of potential donors, in USA as well as in Europe.

There is a clear report of the expenditures in 2011, reaching 5315 Euros. TecTask would kindly appreciate a financial support similar to the past years in the amount of US\$ 7000. An increase would be welcomed as the activities will grow in 2012 due to the assignment of new officers and associated launch of new initiatives.

The Committee ACCEPTED the TecTask' report

5.b.6. Geoscience for Environmental Management (GEM) -

Rapporteur: Peter Bobrowsky

GEM is the primary commission in the IUGS dealing with environmental issues. An ARC was completed in 2010. Currently have several active working groups on topics such as dust, water, climate change and hazards. Very active membership will host 3 sessions in Australia, up to date website, contributed 2 papers to Episodes in 2011 (2 more in preparation), and publishes thru the GSL. The Vice Chair Dr He was head of the CCOP. Officers are diverse and multi national. GEM has a very good network of collaborators and partners who provide considerable in-kind support. Each working group delivered several outputs. And there were 2 internal newsletters issued within the Commission as well as a few

external publications. Overall budget of almost \$100,000 per year. IUGS contribution is quite small. GEM should be congratulated on addressing the concerns of the ARC and delivering an exceptional output for 2011.

REQUEST: \$10,000 USD Congratulations – no comments or questions.

The Committee ACCEPTED the GEM's report

5.b.7 Proposals for new IUGS Commissions - None submitted.

5.c. TASK GROUPS

5.c.1. Global Geochemical Baselines (TGGGB)

Rapporteur: Wesley Hill

The mission of the Task Group on Global Geochemical Baselines is (1) to prepare a global geochemical database, and its representation in map form, and (2) to document the concentration and distribution of chemical elements and species in the Earth's near-surface environment.

Task Group activities include:

- Developing partnerships with countries conducting broad-scale geochemical mapping studies;
- Providing consultation and training in the form of workshops and short courses;
- Organizing periodic international symposia and conferences to foster communication among the geochemical mapping community;
- Developing criteria for certifying those projects that are acceptable for inclusion in a global database;
- Acting as a repository for data collected by projects meeting the standards of harmonization;
- Preparing complete metadata for the various certified projects;
- Ultimately prepare a global geochemical database and atlas.

Project Funding

This project does not have any direct funding source other than IUGS. Within Europe, National Geological Surveys, and associated institutes and universities, have provided staff time and support to the project. A conservative estimate of the cost for the production of the *Geochemical Atlas of Europe* is 5 million Euro (approx. 7.1 million USD). Other countries, including China, Cyprus, Russia, Colombia, India, Brazil, Canada, Mexico, Nigeria and the United States have provided funds through their National Geological Surveys or related institutes. A recent training course on Geochemical Mapping and Environmental Geochemical Survey for African Countries took place in China in November 2011 and the cost was approximately 70,000 USD. The course was sponsored by the Ministry of Commerce of the People's Republic of China. Between 2007–2011, the US Geological Survey has provided approximately \$6,000,000 Million USD for sampling, analyses, and staff salaries for the soil geochemical survey of the United States.

Scientific Accomplishments 2011

There was continued and significant project progress during 2011. The full Task Group 2011 Annual Report summarizes details, activities and scientific accomplishments within: U.S., Mexico, Brazil, Columbia, China, India, Australia, Boundary Regions of China and Mongolia, East and Southeast Asia, Africa, and Europe.

Training Course, Geochemical Mapping/Environmental Geochemical Survey for African Countries

A training course on Geochemical Mapping and Environmental Geochemical Survey for African Countries took place in Beijing in November 2011. The training course was sponsored by the Ministry of Commerce of the People's Republic of China. Twenty-three geoscientists from 12 African countries (Eritrea, Ethiopia, Guinea, Liberia, Malawi, Nigeria, Sierra Leone, South Sudanese, Sudan, Tanzania, Uganda and Zimbabwe) participated in the course. The training course comprised lectures, field sampling training, and laboratory demonstrations. This is the second training course on geochemical mapping for Africa given by China, after the first course in 2004.

Public Relations Accomplishments 2011

- Strategy to reorganize and update the Task Group's website material
- GEMAS calendar
- CD of the FOREGS/EuroGeoSurveys Geochemical Atlas of Europe, which includes the two volumes of the Atlas, the analytical data, the field manual, and the IGCP 259 Report continues to be distributed at international conferences. More than 2,300 copies have been distributed to date.
- Distribution of the memorial issue DVD to honor Arthur G. Darnley (1930-2006). More than 1,000 copies have been distributed.

Issues Encountered in 2011

The main problem is the lack of funding that is required to achieve the objectives of the project at the global scale. The geochemical baseline project in Europe was funded by the participating European Geological Surveys. Ongoing work in North America, Australia, India, China and Cyprus, for example, are similarly funded by national geological surveys or other national scientific institutions. Some proposed activities, such as the mapping project by the member countries of East and Southeast Asia (CCOP), have been delayed due to lack of funding. Funds are required for training, transportation, additional analytical services and quality control. In addition, the Task Group is almost entirely dependent on funds from participating agencies for marketing activities, such as website development and workshops.

Expenditures 2011

The Task Group received \$5,000 USD from IUGS in 2011. This amount is planned for future promotional activities, and assistance to developing country participants. The cost of the EuroGeoSurveys programme over the past year is estimated to be in excess of US \$50,000. The overall cost of the FOREGS/EGS activities over the past decade or so is difficult to estimate but is thought to be in excess of \$11 Million USD. These funds were provided from the Geological Surveys of participating countries within Europe. The cost of the soil geochemical mapping project in the United States in 2011 was approximately \$1 Million USD, and the Cyprus Soil Geochemical Atlas about \$1 Million USD.

2012 Work Plan

The revision of the FOREGS Geochemical Mapping Field Manual is progressing, and will be completed in 2011, and likely be published by the Geological Survey of Finland in 2012. The 2012 TG business meeting will either be at the EuroGeoSurveys Geochemistry Expert Group meeting in Portugal or at the IGC Brisbane.

2012 Budget Information, Potential Funding Sources, and Request

The success of the Task Group to date is dependent on funding from sources outside IUGS and IAGC. This funding has come primarily from national geological surveys and other scientific institutions in participating countries. Estimated over the past ten years, \$32 Million USD has been spent on broad-scale geochemical surveys. Funding from IUGS has been between \$1,500 - \$4,000 USD per year from 2003-2010, and \$ 5,000 USD for 2011. Funding has been used for promotional purposes (DVD distribution), website, and workshops. IAGC has provided sporadic funding of \$2,000 USD over the past years to assist with travel expenses.

The current funding is barely enough for the Task Group to function as a viable entity within IUGS and IAGC. The IUGS 2008 ARC committee recommended that funding to the Task Group be increased to \$5,000 USD per year for operations. The ARC also recommended that IUGS provide an occasionally influx of about \$25,000 USD to the Task Group for the purpose of holding workshops in African and Asian countries to promote the establishment of international-scale geochemical mapping projects. The Task Group appreciates the recognition by the ARC for the need of this additional funding and we have plans to use this increased amount to hold training workshops in South-East Asia, India, or Africa in 2012 or 2013.

TG Requested Funding for 2012

We formally ask the IUGS Executive Committee to consider the 2008 ARC recommendation for increased funding and officially request \$30,000 USD in 2012. A similar request was turned down in previous years.

We ask for reconsideration in 2012. Our Public Relations and Finance Committee will continue to seek funding from other sources, but has proven to be most difficult.

Reviewer Comments: The last ARC review for this Task Group was performed in 2008. It may be time for the IUGS to perform another ARC in 2012 to re-evaluate the budget situation and EC recommendations accepted in 2013.

62nd EC Meeting Paris, ACTION ITEM #8: to determine the exact structure and type of relationship that exists between the IUGS TGGGB and the new Tier 2 UNESCO Geochemical Institute in China.

Update: Regarding the International Center on Global-Scale Geochemistry, it has not been recognized yet as an official Category II center of UNESCO. It is planned to be on the UNESCO Executive Committee agenda Spring 2012. The IUGS/IAGC Task Group on Global Geochemical Baselines (TGGGB) discussed the UNESCO proposal and the relationship between the proposed Center and the Task Group. The Chinese partners made it clear that they wanted the Task Group to continue and to provide guidance in establishing a work plan for the proposed Center and this is still the current status. The TG Chair, David Smith, believes that if the Center is approved and operates as hoped it can take over the current duties of the Task Group and the current Task Group leadership can 'declare victory'. However, for the time being, the Task Group is a huge supporter of the establishment of the Center and looks forward to playing a leading role on the advisory committee. Funding for the proposed Center will initially be provided by the Chinese government. The Task Group will continue to request support of approximately \$5,000 USD per year from IUGS for TG operations. The TG thinks that the China Ministry of Foreign Affairs will complete its deliberations in time for the issue of the Center to be considered at the UNESCO spring meeting.

Alberto Riccardi commented that the Center they are organizing in China – UNESCO Global Scale Geochemistry is on the UNESCO agenda for Spring 2012. The Government of China is providing the funding.

The Committee ACCEPTED the TGGGB's report

5.c.2. Geoheritage

Rapporteurs: Wesley Hill/Jacques Charvet

This Task Group is a new one, officially created in November 2010.

There are three main objectives:

- To develop an inventory of geoheritage sites. Their list and content should be available from any computer.
- To compile the regulations on trade of objects like fossils, mineral, meteorites existing in different countries, which are usually difficult to obtain, and make this information available on a website.
- To provide a single point of reference and coordination for the current diverse and disparate activities in geoheritage being undertaken by the Union.

There is a steering committee of 10 members, chaired by Patrick de Wever and including 4 IUGS EC members.

In 2011, besides some action on Geoheritage properly, the Task Group joined other organisations dealing with Geoheritage at local, national and international level, and participated in several meetings in Europe and Africa. The first general meeting occurred during the GeoReg meeting in Lille, in October, with two days devoted to geological and geographical heritage, teaching-education, popular science, Web sites, including a specific ProGEO session convened by P. De Wever.

The Task Group attended also the First International Conference on African and Arabian Geoparks: Aspiring Geoparks in Africa and Arab world, El Jadida, Morocco, 21-28 November, 2011, organized by Ezzoura Errami.

The Task Group started the setting of a database dealing with the regulations occurring in different countries: it is done for UNESCO and 8 countries, plus two in process.

Contacts were also established for Geoheritage in Kenya in order to prospect the possibility of including geology in touristic tours of wild animal parks and explore the possibilities of making geological reserves.

The allocation of 6000 US\$ (4217 €) was entirely spent.

The action plan for 2012 includes:

- The improvement of the database on regulations
- The improvement of the Geosites database, in cooperation with ProGeo

The attendance to 3 meetings: IGC in Brisbane (August), Pro-Geo Geoheritage in Bari, Italy (September), Inventory and Geoheritage in Paris, France (November).

The anticipated budget for 2012 reaches 5800 €.

The Committee ACCEPTED the TGG's report

- **ACTION ITEM # 10.** Councillor Wesley HILL to inform the Task Group on GeoHeritage that an effective website must be online, active and populated before the Brisbane congress.

5.c.3. Heritage Stone (TGHS)

Rapporteur: S. Pereira

HERITAGE STONE DESIGNATION – IUGS Task Group
Commission C-10 Building Stones and Ornamental Rocks, International Association of Engineering Geology and the Environment – J. Pereira Report was presented at the meeting.

Note: the TOR have been approved.

Terms of Reference

Purpose

1. The objective of these “Terms of Reference” is to provide an ongoing working Frame work that facilitates formal designation of a natural stone product as a “Global Heritage Stone Resource” (GHSR).
2. Provision is also made for associated formal designations of natural stone materials, and for formal recognition of specified features characterising natural stone resources, where deemed appropriate.

Definitions

3. Natural stone refers to stone (= rock), removed from its original formation, in blocks, slabs or fragments; and subsequently utilised in its natural state.
4. A GHSR is a designated natural stone that has achieved widespread use over a significant historical period with due recognition in human culture.
5. A Global Heritage Stone Province (GHSP) is a designated area, where two or more GHSRs are associated in close geographic proximity and by their common geology.

Administration

6. Designations of a GHSR and a Global Heritage Stone Province shall be the responsibility of this Task Group/Working Party, henceforth termed the Task Group.
7. The Task Group is established as a formal entity both of the “International Union of Geological Sciences” (IUGS) and “Commission (C-10) - Building Stones and Ornamental Rocks” of the “International Association for Engineering Geology and the Environment” (IAEG).

Management

8. A Board of Management, henceforth called the Board, shall be established to administer the Task Group, including appointment of a President and Secretary General.
9. The Board shall be appointed for a term of 4 years and be available for reappointment.
10. Mid-term vacancies on the Board shall be filled through agreement by the residual Board.
11. Reappointment of the Board shall coincide with the International Geological Congress.
12. Corresponding Board Members from different countries shall be appointed for the purpose of preparing GHSR citations, overseeing the GHSR Register and promoting the GHSR designation.
13. The duties of the Secretary General shall include:
 - a. Maintenance of an interim list and folio of GHSR nominations and their state of deliberation.
 - b. Maintenance of a Register of approved GHSR designations.
 - c. The recording all GHSR decisions.
 - d. Preparation of regular Circulars that provide up-to-date GHSR news.
 - e. Maintenance of a GHSR website that provides GHSR information to the wider community.
 - f. Maintenance of a list of Corresponding Members.
 - g. Proper administration of any funds or monies collected by or provided to the Task Group with appropriate reporting of expenditure.

Composition of the Board of Management

14. The Board shall comprise representatives from most world natural stone producing regions.
15. The Board shall contain no more than 14 voting members, including the President and Secretary General, with no predominance from any one country.
16. The Board shall, where possible, contain at least one representative from Europe, North America, South America, North & East Asia, South & West Asia, Africa and Oceania.
17. The Chairman of IAEG C-10 shall be a member of the Board, *ex officio*.
18. The limited number of members on the Board shall not preclude the establishment of national or regional GHSR subcommittees that have the aim of advancing GHSR nominations.

Corresponding Members

19. A Corresponding Member of the Task Group shall be any person who:
 - a. Expresses an interest in the work of the Task Group.
 - b. Provides their email address to Secretary General.
 - c. Receives routine correspondence associated with the work of the Task Group.
20. The Board may co-opt nonvoting Corresponding Members, when and where appropriate.
21. The Board may remove Corresponding Members from the List if deemed necessary.

Approval of GHSR Citations

22. The Board shall:
 - a. Establish a standing list of potential GHSRs.
 - b. Solicit (and if appropriate prepare) and accept draft citations for GHSR status and facilitate research papers discussing these citations.
 - c. Consult national or regional authorities and Corresponding Members with respect to draft citations.
 - d. Revise draft citations as appropriate with further consultations if deemed necessary.
 - e. Approve final draft citations for designated GHSR status or designate, as an alternative to GHSR status, a heritage stone that has national or regional significance.

Additional responsibilities of the Board

23. Other responsibilities of the Board shall include:
 - a. Transmission of an Annual Report of Task Group activities to the IUGS Executive Committee and IAEG Commission 10 – Building Stone and Ornamental Rocks.
 - b. Promotion and publicity for approved GHSRs.
 - c. Modification to previously approved GHSR citations upon application or upon its own initiative.
 - d. Reassignment of a GHSR or heritage stone previously deemed of national/regional importance.
 - e. Delisting of recognised GHSRs from the Register upon application or upon its own initiative, if deemed appropriate.

Guidance for GHSR recognition

24. GHSR may be recognised if the natural stone under consideration has most of the following attributes.
 - a. Historic use for a period of at least 50 years.

- b. Wide-ranging geographic application.
 - c. Utilisation in significant public or industrial projects.
 - d. Common recognition as a cultural icon, potentially including association with national identity or a significant individual contribution to architecture.
 - e. Ongoing availability of material for quarrying.
 - f. Potential benefits (cultural, scientific, architectural, environmental and/or commercial) arising from GHSR designation.
25. A GHSR may include natural stones that are currently being quarried, natural stone that is primarily of heritage significance, or natural stones of archaeological importance.
26. The intent of recognising a GHSR arises from the value of:
- a. Promoting increased community, national and international awareness of natural stone and its widespread utilisation in human culture.
 - b. Gaining additional professional recognition for, and understanding of, natural stone amongst professional workers, primarily in geology, engineering, architecture and stone/building conservation.
 - c. Highlighting the significant positive attributes of natural stone in terms of sustainability and regional economic development.
 - d. Safeguarding and protecting heritage stone resources from subsequent sterilisation by alternative human endeavour.
 - e. Raising the profile of many natural stone materials to greater prominence through researching citations.
 - f. Encouraging proper management of well known existing natural stone extraction operations in order to ensure future availability and utilisation.
 - g. Offering a means or mechanism, operating on a worldwide basis, to formalise selected characteristics of natural stone material, for professional purposes and otherwise, in an internationally accepted context.
 - h. Enhancing international co-operation in the research and utilisation of natural stone resources.
 - i. Assisting marketing of natural stone as a commercial commodity, sculptural/decorative material and as a tourism product.

Citation

27. A citation (in draft and approved form) shall be publicly available for all GHSR nominations that are formally considered and approved by the Board.
28. Citations shall contain most of the following data
- a. A traditional name, widely used, under which the stone is commonly known. Examples could be “Balmoral Red”, “Petit Granite” or a name already

approved via stratigraphic nomenclature.

- b. Company names, even those with restricted use. These should be avoided for use as the principal name but need to be referenced in a comprehensive assessment.
 - c. A place of origin including location of area, quarry or mine where natural stone typical of the GHSR is available in an unprocessed state, plus an assessment of development constraints on the resource.
 - d. A description of the GHSR's locational setting (geocoordinates) together with geological age and setting, petrographic name, stratigraphic name (if different to traditional name), typical colour/natural variability, other valuable natural and technical characteristics.
 - e. An assessment of historic (or archaeological) use, geographic application and other pertinent general information about the GHSR.
 - f. Specified sculptures, buildings, ornaments, technological objects etc of iconic or heritage nature where the proposed GHSR has been utilised.
 - g. Optional additional designations being requested, complementary to the GHSR designation. Examples may be "Classic Global Granite", "Global Ornamental Stone", "International Decorative Stone Icon"
29. GHSP citations shall, where feasible, include similar data to that recommended for GHSRs or be designated simply as that region in which a group of specified GHSRs are located.
30. Citations may specify attributes, the maintenance of which is necessary to retain GHSR status.

Complementation

31. Designation of a GHSR shall, be separate from, yet, where necessary, complement and reinforce any other international standards and references.
32. Designation of a GHSR shall, where possible, encourage and complement the establishment of additional i.e. national, regional and local, recognition of natural stone.

Revision of "Terms of Reference"

33. Revision of these "Terms of Reference" may be made by the Board subject to approval by the IAEG C 10 – Building Stone and Ornamental Rocks and the IUGS Executive Committee and approval by the IUGS Council.

The Committee ACCEPTED the TGHS report and ratified the approval of its TOR

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- **ACTION ITEM # 12.** President Albert RICCARDI to inform the Heritage Stone Task Group that their Terms of Reference have been approved by the EC.
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5.c.4. Proposals for New Task Groups – None received.

5.d. INITIATIVES

5.d.1. Initiative on Forensic Geology – Rapporteur: Peter Bobrowsky

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Although the documented history of forensic geology can be traced to the latter half of the 19th Century, in the past ten years or so have there been significant interests and developments in the multi-disciplinary fields of forensic geology throughout the world.

Since about the millennium there have been at least 25 international meetings, conferences and seminars on or including different aspect of forensic geology. Furthermore, at least 5 books have been published on the subject and numerous technical papers in scientific journals, conference proceedings, magazines and newspapers.

The International Union of Geological Sciences (IUGS), Initiative on Forensic Geology (IFG) was officially launched during the 62nd Executive Committee Meeting of the IUGS, which was held at UNESCO headquarters, in Paris, France, on 22nd February 2011.

The Committee ACCEPTED the Forensic Geology Initiative report

5.e ADHERING ORGANIZATIONS

5.e.1 Application for Membership – None received.

5.e.2 Reports of Adhering Organizations

Manuel Reguerio, IGME, suggested that IUGS improve the list of Adhering Organizations to include the Principal and the Secretariat and the contact information.

Sarmad Ahmood mentioned that his AGA report would cover information for both AGA Iraq NC.

- 1. ALBANIA – No report**
- 2. ARGENTINA - Rapporteur Alberto Riccardi**

The IUGS National Committee is the Executive Board of the Argentinean Geological Society, which consists of 12 members. During 2010 the Committee had ten meeting.

Main activities in the year 2010 were: 1) updating of the website, 2) Creation and uploading of information in a facebook and twitter site; 3) Diffusion of Geological Topics through public conferences, 4) Lecture on a pioneer of Argentinean geology in a public seminar organized by the Government of the City of Buenos Aires, 5) Lecture in the National University of Córdoba, about the role of geologist in XXI century, 6) short course on Earthquakes and vulcanism (Epuen, following earthquake of 27/2/2010) required by local, regional and provincial governments; 7) Lecture on Shale Gas; 8) Several postgraduate courses, 9) publication of symposia of the last Argentinian Geological Congress and 4 issues of the journal of the Argentinean Geological Society; 10) Initiate talks with the Argentinean Geological Survey and other stakeholders in order to organize an Argentinian National Committee for Geoparks.

During 2011 will be held the Comments Argentinian Geological Congress, which is sponsored by the NC.

- 3. AUSTRALIA – Rapporteur Colin Simpson**

The IUGS Adhering Organization for Australia is the National Committee for Earth Sciences, (NCES) which operates under the Australian Academy of Science.

The NCES has a core membership of nine representing universities, research centres and the national geoscience agency, Geoscience Australia. The NCES has links to various other geoscience organizations in Australia including the Geological Society of Australia, the Australian Geoscience Council, and the Organizing committees of several major national and international conferences.

Strategic Issues:

A full revision of the national strategic plan for the Earth Sciences is scheduled to begin in 2013.

Major Conferences:

- The 25th General Assembly of the International Union of Geodesy and Geophysics, was held in Melbourne in 2011.
- The 34th International Geological Congress will be held on Brisbane in 2012. Members of the national committee are heavily involved with the meeting organisation and development of the Scientific Program.
- The Australian Earth Sciences Convention for 2012 will be held in association with the International Geological Congress

(The remaining 2 pages of the NCES report was devoted entirely to the progress to date of the organizing and planning of the International Geological Congress (IGC), Brisbane, in August 2012. An updated report on the IGC will be presented at the EC).

4. **AUSTRIA** - No report.
5. **AZERBAIJAN** – Rapporteur Colin Simpson

Azerbaijan National Committee of Geologists (ANCG)

In 2011, three meetings of ANCG were held, dedicated to geological questions of the Republic and also to the oncoming 34th International Geological Congress in Australia.

In October 2011, the ANCG and Geology Institute of ANAS hosted the 4th International Scientific Conference of Young Scientists and Students: “New approaches and achievements in field of Earth Sciences”, dedicated to 20th anniversary of Independence of Azerbaijan Republic, and supported financially by the Science Development Fund of the country and by BP. A volume of abstracts was published.

Young scientists from Russia, Belarus, Kazakhstan, Kyrgyzstan, Austria, Germany, Iran, and students from Azerbaijan State Oil Academy and Baku State University participated in the conference.

In June and October, two scientific sessions, with volumes of proceedings, were organized for the 100th and 90th anniversaries, respectively, of two members of the Academy of Sciences: A.G. Aliyev, founder of the lithological school, and T.A. Azanov, president of Azerbaijan paleontological community.

The Committee makes two suggestions:

- the geological priority of National Committees should be taken into account by IUGS in solving global problems of Earth geology,
 - a division dealing with nanotechnological research in different branches of geological disciplines should be marked in Episodes.
-
- **ACTION ITEM # 29.** EC to take into account the proposal of the Azerbaijan NC to consider

- geological priorities of National Committees in solving global problems in Earth sciences.
 - **ACTION ITEM # 30.** Publications Committee evaluate the proposal of the Azerbaijan NC to include in *Episodes* a section on nanotechnological research in different branches of geological disciplines.
6. **BANGLADESH** – No report.
 7. **BELGIUM** - Report sent after the EC Meeting.

The Belgium National Committee of Geological Sciences forms part of the “Casse des Sciences de l’Academie Royale de Belgique, and the Klassee der Wetenschappen van de Koninklijke. The mission of the committee is to promote geology and to coordinate at a national and international level, the activities of the geological departments that are present in the different Belgian academic and scientific institutions. Members of the committee also act as representatives of Belgium in the International Council of Scientific Unions (ICSU). At present, the national committee coordinates the activity of a number of commissions and working groups such as the national Commission on Stratigraphy (sub-divided in specific subcommissions) and the Working Group on Structural Geology. The National Committee of Geological Sciences of Belgium has close relationships with the International Union of Geological Sciences (IUGS) which is also a member of ICSU. The IUGS is a non-governmental organization that promotes and encourages the study of geological problems, especially those of world-wide significance.

The Committee consists of a Board to include the President, Vice-President, Secretary and Vice-Secretary, 12 active members, and 10 honorary members. There were two committee meetings held in 2011. The committee is currently organizing a symposium devoted to the Belgian national geological heritage and to geotourism which is planned for November 2012.

8. **BOSNIA** – Rapporteur Alberto Riccardi

The region is referred to as BOSNIA AND HERZEGOVINA and the name of the adhering organization is the Geological Society of Bosnia and Herzegovina. The committee is lead by the Board Officers which consists of five members on the Administrative Board. The President and two Vice Presidents are rotated every 8 months. The National Committee leads and coordinates the activities of the Society and provides communication with domestic institutions and public, as well as, with international geosciences community. The committee meets five times annually.

One of the major concerns is the need for more economic support for meetings to promote the geological sciences especially related to geoheritage and research on disaster mitigation. A major accomplishment is the organization of Geologists Symposium every two years and publication of the Scientist Journal. In November of 2011 the committee organized the 4th Conference of B&H Geologists which was attended by international participants from Austria, Slovenia, Serbia and Croatia.

The most recent hazard dealt with by the committee is landslide geo-hazard. The committee does not have the economic means to send an expert to represent geology in the Bosnia and Herzegovina region to the IUGS-IGC. If a grant becomes available an expert will represent Bosnia at the IGC.

9. **BOTSWANA** – No report.
10. **BRAZIL** – No report.
11. **BULGARIA** – No report.
12. **CAMEROON** – No report.
13. **CANADA** -- Rapporteur Peter Bobrowsky

In May 2011, at the Canadian Federation of Earth Sciences board meeting, board members voted to amalgamate the IUGS and IGCP activities under one committee called the International committee. A new director, Andrée Blais-Stevens, was also appointed to head this committee. One of her first tasks was to re-populate the international committee because the terms of the committee members had ended.

- Canada has been and continues to be active in the IGCP projects both as Leaders and Participants in projects. Funding from IGCP was terminated as of 2009 and the committee remains active as an administrative body only until funding sources are identified.
- CNC-IYPE has terminated however, legacy activities have been transferred to CFES.
- Canada has become a member of the Global Geoparks Network with its Stonehammer Geopark which is well funded in Canada.
- The Intercontinental Drilling Program (ICDP) in Canada has terminated
- 100 Canadians are expected to attend the 34th IGC in Brisbane.

14. **CHILE** – No Report.

15. **CHINA** – Rapporteur Sampat K. Tandon

The Geological Society of China (GSC), which was founded in Beijing in 1922, is a scientific and non-governmental organization of Chinese geoscientific workers, with individual membership of more than 60,000 and 31 branches at the municipal or provincial level at present. There are 47 established scientific commissions, research institutes or working committees under GSC, covering a wide range of fields in earth sciences. Each year, GSC and its scientific commissions, research institutes and working committees conduct academic activities in various forms, including symposia, workshops, field investigations, consulting service and so on. There are 3 divisions performing routine work of the Society, including Permanent Secretariat, Division of Periodicals and Division of International Affairs.

In 2011 CGS held 73 meetings.

The major events and accomplishments in 2011 are as follows:

The term of the 38th Session of the council of Geological Society of China (GSC) was 2008-2011 and on November 1st 2011, a council meeting was held to elect a new session of the council—the 39th Session of GSC Council.

The Geological Society of China (GSC) pays great attention to scientific exchanges. In 2011, 73 academic meetings (3 of them were international ones) were held under the framework of GSC, for which GSC and its scientific commissions, research institutes and working committees were either sponsors, co-sponsors or organizers, with participants and submitted papers totaling over 10,000 and 6000 respectively.

Participation in the Activities of IUGS

A. As the Chinese adhering organization to IUGS, Geological Society of China is always an active participant in the events of IUGS. In 2011, Chinese colleagues participated in the following activities:

B. Attending the 50th Anniversary of IUGS

Led by Prof. Dong Shuwen, the Vice-President of Chinese Academy of Geological Sciences (CAGS), a 9-person delegation from China attended the 50th Anniversary of IUGS on February 21st, 2011. The Chinese delegation was composed of officials from Ministry of Land and Resources of China (MLR) and China Geological Survey (CGS) and geologists from CAGS and GSC.

C. At the celebration of the 50th Anniversary of IUGS, Prof. Alberto Riccardi, IUGS President, expressed his appreciation of Chinese colleagues' comprehensive and long-term participation in the scientific activities of IUGS, their contribution to the development of geosciences, as well as the attendance of Chinese delegation to the celebration of the 50th Anniversary of IUGS.

D. Recommending Prof. Dong Shuwen as Candidate for Vice-President of Executive Committee of IUGS for the 2012-2016 Term

E. Remittance of 2011 IUGS Membership Fee from China

GSC has paid to the IUGS Treasurer the 2011 IUGS Membership Fee of 19,180.00 USD for China.

Making Preparations for the Chinese Participation in the 34th International Geological Congress (IGC)

- As the Chinese adhering organization to IUGS, GSC takes the responsibility of organizing the Geological Delegation of China to the 34th IGC and making preparations for the Chinese participation in this big event. Preparations finished in 2011 can be summarized as the following:
- **Meeting with the Secretary-General of 34th IGC at the Celebration of the 50th Anniversary of IUGS**
- **Registration for the GeoExpo of 34th IGC**
 - o GSC has booked a booth of 54 square meters for the Geological Delegation of China and a booth of 36 square meters for SinoProbe Program (a big Chinese government-funded program on deep exploration launched in 2008) at the *GeoExpo* of 34th IGC and the total fees for the exhibition display space have been paid to the Congress.
- **Arranging Dr. Ian Lambert's Visit to China**

Preparing the Joint Scientific Meeting between the Geological Society of China (GSC) and the Geological Society of America (GSA)

The meeting is planned to take place in June 2013 and its 1st Circular is going to be released by early February 2012.

5. Publication

More than 3500 academic papers were published in 19 academic periodicals of GSC in 2011. Among the 19 periodicals of GSC, the most productive one is "*Acta Geologica Sinica-English Edition*", which mainly reports the latest and most important achievements in the theoretical and basic research in geological sciences together with new technologies in China.

A web portal of Chinese geoscientific journals was established by GSC's Scientific Commission on Geoscientific Journals and opened officially in 2009, covering 232 Chinese journals in Earth sciences (<http://www.geojournals.cn>).

- The 42nd World Earth Day

It was the 42nd World Earth Day on April 22, 2011. To mark the 40th Earth Day, GSC organized a series of activities with the theme of "Cherishing Earth Resources, Transforming Development Mode". People across China held various campaigns to raise public awareness, including visits to geological museums and research institutions, dissemination of science popularization materials and books, counseling service to the public and picture galleries. More than 500,000 persons participated in the above activities.

- 2011 National Science Popularization Day

Activities of the 2011 National Science Day started on September 17 and ended on 23. As Member Society of the CAST, GSC organized a photo contest with the theme of "Protecting Water Resources—Our Past, Present and Future".

16. **COLOMBIA** – No report.

17. **COSTA RICA** - No report.

18. **CROATIA** – No report.

19. **CYPRUS** – Rapporteur Peter Bobrowsky

The adhering body is represented by the Geological Survey Department (GSD) of Cyprus. Their committee includes representatives from the Scienc Council and the Academy. The GSD has 18 staff members. Committee metes monthly and primary attention was given to the promotion of the Roodos Geopark as well as some landslide mapping issues and mineral exploration. Three main accomplishments (geochemical atlas, landslide study of Paphos and a study of building stones). They hope to promote their geochemical work as a publication of Episodes.

IUGS thanks the Geological Survey Department of Cyprus for their update and report and are especially grateful for the work they have done on geoparks. We encourage them to publish in Episodes.

20. **CZECH REPUBLIC** – Received after the IUGS-EC Meeting.

The committee consists of 10 members and there was one meeting held in 2011.

The major accomplishments of the committee in 2011 were as follows:

Main international activities in Czechia

In 2011, the Czech Republic organized several important scientific meetings. A student scientific conference SGA was successfully held here, the Young Earth Scientist (YES) Network having been enrolled into its preparations. Another extraordinary meeting, the 9th International Eclogite Conference, was held in the Mariánské Lázně spa region. A summer highlight was the Goldschmidt Conference organized in Prague, and the geoscientific communities from Czechia, Slovakia, Poland, and other countries had an excellent chance to meet during the Common Conference of the Czech and Slovak geological societies in Monínek, Central Bohemia, in September.

It is highly appreciated that the geoscientific community proceeded with the two national journals – the Bulletin of Geosciences focused on sedimentology, and the Journal of Geosciences with the basement and hardrock-oriented preference – which are slowly reaching better quality and higher international scientific appreciation. In 2011, the Academic “Week of Science” and public days in the Czech Academy of Science and the Czech Geological Survey were motivated by Czech participation in the Antarctic research and global problems related to natural reserves available on the Earth. The painting exhibition “Gaia, my piece of land” continued by its fifth repetition, and the final award ceremony was another successful public event on the floor of the Czech Ministry of Environment. The cooperation with the Prague Botanic and ZOO gardens was proposed already at the beginning of the IYPE period. It included also the proposal to construct a special GeoTour showing the unique features of the Prague-Troja geotope. This GeoTour was prepared by the Prague Botanic Garden in cooperation with the private Geosvět Company and opened at the end of 2011.

The CNGC members discussed also how to meet with the proposal to become an active member of the “Earth Science Matters Foundation”.

It was agreed that we are not able to constitute any new representation body. It could be the CNGC as the already established IUGS adhering member which will be the responsible leader of activities towards the ESMF and, if this proposal will be accepted, also the coordinator of relevant activities and information. There should be better and closer cooperation between the Scientific Outreach Board of the Czech Academy of Science, the Czech National Geopark Council, and also the Czech UNESCO Commission. It was pinpointed that any ESMF activity should stem from real needs of our society, parallel to and in synergy with slowly rising general understanding of global problems and Earth’s limits. An example of this growing hunger for geoinformation is the general wide acceptance of the geopark concept, and also slowly rising demand for geoscientific expertise and leadership in specific fields of our life (shale gas, soil, water, energy, pollution...).

The geopark concept became widely accepted throughout the Czech territory. . One of the most important actions was allocation of budget: the geopark concept was enrolled into the list of grant topics supported by the Czech Ministry of Environments, and three Czech geoparks thus reached the financial aid for their development.

The Council accepted two applicant regions into the five-year preparatory period (the Vysočina and Blaník regions), and two newly formed geopark candidates have already proven their sustainable practice and experience with geological heritage and its presentation to the public. They were recommended by the Czech National Geopark Council for the National Geopark Certification to the Czech Minister of Environments. These two approved regions are “GeoLoc” – the Tachov part of the Czech-Bavarian GP in western Bohemia, and the Železné Hory Geopark in eastern Bohemia.

The web page supporting Czech geopark network www.geology.cz/narodnigeoparky was created and its Czech version was launched on by the CGS.

Numerous other regions are developing their own policy to meet with general geotouristic and management principles of the geopark concept (Krkonoše Mts., Labe sandstones, Jeseníky Mts., Broumov area, Joachim Barrande GP). The bilateral Czech-Polish project “Geostrada Sudetska” is reaching its final stage with most of its targets fulfilled.

The Czech UNESCO category geopark Czech Paradise together with CGS organized the Information meeting for local policy makers. This meeting ended up with an unforeseen success as all local representatives have accepted the invitation and took their part in. They appreciated most pieces of the information on local geoheritage treasures given in their historical and present-day context, and examined their possible impact to the life in the cadastres under their responsibility.

Activities related to IGCP:

The Czech Republic continuously and actively participates in the IGCP programmes from 1972.

The Czech geoscientists participated in or coordinated (*) 6 IGCP projects in 2011:

Czech Geological Survey participated in the Antarctic Programme.

The project under the GEOSS framework continued in the CGS, mostly processing new geochemical, socio-economic and remote sensing data from African and Bohemian territories.

There is the International Speleological Conference in preparation in the Czech Republic for 2012.

Comments

The election for the CNGC for the period 2013–2016 will be arranged at the end of the year 2012. It is proposed that representatives of applied branches of geology should be more actively involved in the CNGC work either directly, or as guests or consultants.

21. **DENMARK** – No report.

22. **EGYPT** – No report.

23. **ESTONIA** – Rapporteur Alberto Riccardi

The Estonian National Committee for Geology (EstNCG) is a subcommittee which was established by the Estonian Academy of Sciences for coordination and promoting international contacts with IUGS, IGCP and others. The two most important geological bodies are the two university institutes, geological survey, geological society, and the academy of sciences of which all are represented by top level scientists. The committee traditionally meets twice annually and current activities are performed mainly through electronic channels.

2011 was a year of continued discussions about the major tasks of the committee. In May we presented an invited by IUGS information about our activities for publication on-line. Our worries about diminishing

of role and status of the Estonian Geological Survey in the country initiated our visit to the Minister of the Environment at the end of year, who agreed to form a working group for more detailed study of situation and possibilities for improvement.

In 2011 a major accomplishment was the 8th Baltic stratigraphical conference (August, Riga, in Latvia), our representatives participated in organisation and some results of discussions will be published in the Estonian Journal of Earth Sciences. Most importantly, our policy to widen co-operation of geological organisations in the region gave good result – Polish delegation expressed their wish to join the Baltic stratigraphical association.

The major activities included: international symposium, workshop, outreach activities, hosting international/national meetings..., etc. The Institute of Geology, Tallinn University of Technology is hosting web-site of the new IGCP project 591.

There has been no geo-hazard recently in Estonia as it is known as a rather stable area in Baltoscandia, earthquakes etc are extremely rare. Most worries and debates are connected with the climate change (warming paradigm). Geologists are suggesting keep calm and study thoroughly natural realities both past and present.

EstNCG is in close contact with all geological organizations within the country and providing assistance when necessary.

The committee has no specific activities to be included in *Episodes* or the IUGS website at this time. However they appreciate the invitation and will keep the possibility in mind.

Last year the activities of the IUGS leadership proved that efforts were underway to strengthen contacts with national committees, this is a good beginning and the committee wishes IUGS a successful continuation. The EstNCG is working to strengthen regional contacts between NCG's.

The EstNCG highlights the successful work done by several ICS subcommissions and IGCP projects in the early Palaeozoic (Ordovician and Silurian SCs,

24. **FINLAND** – Rapporteur Alberto Riccardi

The Finnish National Committee for Geology is an organized subcommittee of the Science Council and the Academy coordinated by the Delegation of the Finnish Academies of Science and Letters. There 12 committee members broken down by two from the Geological Survey, five from universities four from societies (2 scientific, 2 applied) and one from the Finnish Academy of Science and Letters.

The committee met three times in 2011 and has two major issues, The Day of Geology and Stabilising the web-based geological portal.

The major accomplishments of the committee (or the geological communities) are as follows:

- The national “Day of Geology” in Finland was organized in September 2011. Geology Day event was held in Yyteri, Pori. About 100 people (target group: teachers) attended the event.
- The Stratigraphic Committee of Finland has had one meeting in 2011. The main activities of the committee have been focused in two working groups.
- The working group of Precambrian geology has published the Guidelines and Procedures for naming Precambrian Geologic Units in Finland in fall 2010.
- The working group of Quaternary deposits had one workshop-meeting during the year. The group has been working to develop the stratigraphic guide for Quaternary deposits. The draft of the guide will be published in 2012.
- The Finnish National Committee for Geology continued its activities in stabilizing a web-based geology portal (www.geologia.fi). The Portal Subcommittee included representatives from four

universities and the Geological Survey of Finland. The portal provides an easy, Finnish language access to geological information for students, teachers, the general audience and the press. The portal is administrated by the Committee and operated by the Finnish Museum for Natural History. The number of people visiting the web site was 73974 in 2011, which indicates continuous increase in site visits in comparison to previous years. Major natural catastrophes, such as the earthquake and tsunami in Japan on March 13, 2011, are seen as a distinct peak in the visitor record.

25. **FRANCE** – Rapporteur Jacques Charvet

The Societe Geologique de France (SGF) is a non-profit association whose mission is to promote Earth Sciences for addressing topics of scientific and societal importance. Those topics are realized through: international scientific meetings, books for educational purposes, and promotion of the conservation of geological heritage. The SGF activities fit with the IUGS scientific objectives:

- making available scientific results on the entire earth system
- participating in the geological education at various levels
- organizing meetings for scientists, and also for a larger public in order to increase the awareness in geology and energy.

SGF is composed of 1000 members, 1600 subscribers for one of its publications, and is managed by a board of 24 people. There were a total of 17 meetings held in 2011, including meetings of the Administration Council and board, one General Assembly and various commissions.

A major issue in 2011 was to make effective the merger of the three major French geological societies (SGF-UFG-CNFG). The three organizations have been working together for more than one year to implement the new society. To make things easier, the presidents of the CNFG and UFG were appointed as vice-presidents of the SGF for the term 2011-2012. The new statutes were finally approved by the ministry on November 4, so the merger is now official. It means that the SGF is now the Adhering Organization to IUGS; the role of former CNFG is taken by a specific commission. The first General Assembly of the new SGF will take place on March 13, 2012.

Regarding other activities, one may note: preparation of 15 years of articles of the BSGF to make them available online, 6 issues of the Bulletin including two thematic issues, 4 of *Géochronique*, 4 books (Vuibert and Springer), improvement of the website, participation in the GeoScienceWorld aggregate, and organisation of international meetings.

The external fundings represent less than 8% of the budget.

The merger of the three French societies led to a communication posted on the IUGS website. The anticipated number of participants to IGC is more than 15. SGF's objectives for the next five years include successful completion of additional international publication projects, increased education in Geosciences, protection of our Earth heritage, increase of the interaction between the academic and industrial communities and international outreach.

26. **GAMBIA** – No report.

27. **GERMANY** – No report.

28. **GREECE** – No report.

29. **GUYANA** – No report.

30. **HUNGARY** – Rapporteur Peter Bobrowsky

The main activities of the National Committee were the following:

- Regular meetings of the National Committee. The Committee held regular meetings 1-3 times a year, where the actual achievements and duties of the committee members or affiliated societies are discussed.
- Organization of outreach activities. On the occasion of the 50th Anniversary of IUGS, the national committee held a half-day symposium and took part in the organization of an Earth Science Fest. The symposium contained five lectures about IUGS activities and the most important subjects of earth science research. The Hungarian institutions had 15 booths at the Fest where the public could meet researchers and had personal conversations. Several hundreds of visitors had the chance to meet researchers, and the local media also published reports about the event.
- A special issue on IUGS is organized for the journal Hungarian Science. Five papers will be published dealing with the history of IUGS and the national committee, risk assessment techniques in Earth Sciences, pollution catastrophes due to mining activities, rare earth elements from a geochemical viewpoint, and water supply perspectives. The journal is published by the Hungarian Academy of Sciences and has a readership covering all disciplines.
- Further activities are shown by the reports from the affiliated societies attached to this report.

31. **ICELAND** – No report.

32. **INDIA** – Rapporteur Alberto Riccardi

The Indian National Science Academy is a National Committee for IUGS and was nominated by the Indian National Science Academy. The committee coordinates and interfaces with scientific groups to generate new programs....etc.

The committee meets once each year however has regular interaction via the internet.

The current issues for the committee are as follows:

Development of major new initiatives in geosciences, including themes such as, a deep bore hole in Indian crust, physics, chemistry and geology of the top 100m of surface, quantitative geomorphology, Precambrian metallogeny, glaciology, climate change modeling and observation, quantitative paleoclimatology, polar sciences expeditions and mapping studies, drilling proposal for Indian ocean at laxmi ridge, initiation of major programmes on contemporary glaciology and glacier dynamics, Ice cores in glaciers, Antarctica and in arctic ice,

Initiation of a discussion regarding major facilities in India, for example, the Accelerator mass spectrometry, Shrimp and several other initiatives of societal relevance.

The major accomplishments of the National Committee (or the geological communities).

The committee has interfaced with most of the geological communities and helped to develop a consensus on various scientific issues including a major Indian Geophysical Congress for the Indian region. This is now pending approval for funding from the Indian government. The committee was also able to persuade INSA to upgrade its IUGS adherence and this was based on the Indian report to IUGS and the new facilities generated with the help of governmental funding from the MoES and Department of Science and Technology. This group was responsible for bringing Episodes publications to India and this has been published regularly. Every news letter of IUGS was sent to over 100 nodal addresses who distributed these further. We consider that IUGS activities are now better known and interfaced to the Indian Geological Community than ever before. We have been able to interface with Indian Geosciences community and have a general consensus of the community in presenting our bid for 2020 IGC in Delhi India. This will be lead by the Geological Survey of India and will be supported by all geosciences institutions and the Ministries of Mines and Earth Sciences in India.

There were several major activities which are listed below:

- Asia Ocenia Geological Congress,

- International Convention on, *A Water vital resource: What science can do* jointly held by International Association of Hydrological Sciences, International Association for Hydrology and National Geophysical Research Institute;
- American Geophysical Union –Chapman meeting on *Complexity and Extreme events in Geosciences* at National Geophysical Research Institute;
- Meeting of IODP- SIPCOP and IWG+ working groups by National Antarctic and Ocean Research Institute ,
- Successful invitation for PAGES open science meeting in Goa during 2013. We expect to make it a major event for policy formulations and outreach activities,
- International workshop on Deep-Sea Drilling in the Indian Ocean, NCAOR, Goa
- Indo-Norwegian meeting on Scientific Cooperation and Collaboration at Goa
- [Sixth Scientific expedition to the Indian sector of Southern Ocean](#)
- [Third National Workshop on Climate Change: Polar climate, Oceans and Monsoon](#)
- Seventh Asia Marine Congress

There have been no major GeoHazards to report on however, there were several floods and extended monsoon rainfall events, continuous seismicity and cyclones.

The geology related activities include:

The Geological Society of India is a vibrant organization and is known for its journal, the Journal of Geological Society of India, now co published with Springer journals. Publication of Episodes commences and the Journal of Earth System Science continued to publish high quality articles. These journals are now attracting articles from the Asian region.

Some of the New initiatives for Human Resource Development and basic Science studies in India and these will find mention in future reports from MoES in Episodes/ IUGS.

- Development of a programme on **Deep Continental Drilling** is being finalized by the MoES and NGRI and we expect it to harness and synergise expertise of various groups in geophysics, seismology, mineralogy and petrology, structural geology;
- Initiation of a new **Centre of Climate Change Research** and for **Advance Training in Earth System Science** at the Indian Institute of Tropical Meteorology by the Ministry of Earth Sciences;
- **Centre for Glaciology** at Wadia Institute for Himalayan Geology, by the Department of Science and Technology.
- India also participated proactively in **IGCP projects of UNESCO** and has a formal mechanism in place and has played active role in various International years.
- The ministry of Earth Sciences has also initiated **long term programmes in Marine Resources and Management** has created **several Ocean Science and Technology Cells** in Universities to study specific aspects ranging from Marine biology and microbiology to beach places, geology and geophysics, and ocean engineering issues including underwater robotics.
- MoES has also initiated **major activities on Monsoon modelling, Biofuels from marine microalgae, Laser diamond anvil cell national facility , Drugs from the Sea,**
- Development of **Open Access Repository** by the National Institute of Oceanography for Ocean Sciences and MoES for results from projects funded by it , are to name a few
- MoES has now nearly completed a **National Programme on the Geological Records of Tsunamis** along the Indian coast.
- New Indian initiatives in establishment of second station in Antarctica, Station and expedition to Arctic and to southern oceans.
- New efforts to develop centres for **Cryogenics, glaciology and glacial dynamics.**

The committee has direct relationship with the IUGS as Professor S.K. Tandon serves as Councillor on the IUGS Executive Committee since 2010. We have also nominated two others for the upcoming elections.

The approximate number of people who intend to participate in IUGS-IGC meeting every 4 years could increase to 100 by raising resources to support travel and should remain same or increase. The cost of registration and living for these meetings is prohibitive and the venue selection should take this into account. Registration fee of 800-1000 US \$ are becoming prohibitive for most and should be addressed by holding meetings in less fancy places.

The committee has a suggestion for improving IUGS activities as there is a need to reduce the costs of conferences so that people from the developing and less developed countries can participate. While there are support programs like Geohosts, more are needed. The alternative would be more participation by video-casting lectures and sessions in real time or as DVDs may be a good effort to archive and to create human resources. We suggested this in our unsuccessful bid proposal but will like to see this implemented. Collectively we should be able to use various dimensions of modern technology to share the scientific riches for those who cannot attend in person due to resource constraints.

33. **IRAQ** – No report.

34. **IRELAND** – No report. Note Mary Carter, Ireland has acknowledged that they had not sent the report and were going to do so ASAP.

35. **ISRAEL** – No report.

36. **ITALY** – Rapporteur Ezzoura Errami

During 2011, a new CNR-IUGS Commission was set by the CNR in order to promote its participation in IUGS activities including IGCP and to stimulate the participation of the entire Italian Earth Sciences community. The commission which consists of 10 members, held two meetings during 2011. The first issue being discussed was the Italian participation to the 34th IGC.

The report focused mainly on the IGCP projects where Italian geoscientists are involved. During 2011, four IGCP projects were lead by Italian geoscientists (projects n° 526, 540, 565, 591). Italian geoscientists were also active in at least seven other IGCP projects.

At the end of the report, a summary of the draft minutes of 39th IGCP Scientific Board Session held in Paris in February 2011 was given. The following points were highlighted (Introduction of the board members, UNESCO field office reports, presentation of UNESCO / IUGS project rankings, review of IGCP board membership, role of IGCP national committee reports, fundraising and participation of developing countries, 'Celebration of 40 years IGCP' anniversary, visibility of IGCP in the next IGC 2012, update on the Global Geoscience Initiative (GGI), Global Geoparks Network, UNESCO Earth Science Education in Africa, Co-operation with the Commission for the Geological Map of the World).

37. **IVORY COAST** – No report.

38. **JAPAN** – No report

39. **JORDAN** – No report.

40. **KHAZAKSTAN** – No report

41. **KENYA** – No report

42. **KOREA, NORTH** – Rapporteur Peter Bobrowsky

A new Adhering Organization, DPRK is represented by the Korean Geological Association. Currently they represent an estimated 2100 people virtually all based in learned and professional organizations in North Korea. Group meets 3 times per year and they are extremely interested in expanding their visibility and capacity building opportunities globally. They have hosted several professional meetings on a variety

of topics such as geophysics of the Paektu volcano or Miocene biology. They hope to send four individuals to the IGC in Brisbane. Peter Bobrowsky visited the DPRK on behalf of the IUGS this past summer.

The DPRK should be thanked for their sincerity in contributing to the mission of the Union and all efforts should be made by the constituents of the Union to support them into developing a better geoscience base in their country. Note to EGN – DPRK is keen to develop the first GEOPARK – no response from EGN.

Peter Bobrowsky reported that Korea is a new member and needs help. They would like to build a good digital library and need a plea for information. In *Episodes*, IUGS should inundate this organization with information.

- **ACTION ITEM # 19.** Secretary General Peter BOBROWSKY to send the contact details for North Korea to all of the EC members.
- **ACTION ITEM # 20.** *Episodes* Editor JAYANANDA to include a short notice in the next issue of *Episodes* inviting geoscientists around the world to send geology articles (PDF) and books to North Korea.
- **ACTION ITEM # 21.** *Episodes* Editor to include information on DPRK in a next issue of *Episodes*.

43. **KOREA, SOUTH** – No report.

44. **KOSOVO** – No report.

45. **LEBANON** – No report.

46. **LITHUANIA** – No report

47. **LUXEMBOURG** – No report

48. **MALAWI** – No report

49. **MALAYSIA** – No report

50. **MEXICO** – No report

51. **MONGOLIA** - No report.

52. **MORROCO** – No report

53. **MOZAMBIQUE** – No report.

54. **NAMIBIA** - Report submitted and received after the IUGS EC Meeting.

The Adhering Organization is the Geological Survey of Namibia. This Organisation has throughout 2011 continued with its programmes relating to regional geology, geophysics (ground and airborne), economic geology, geochemistry, engineering geology, environmental geology and cartography. It has also continued to maintain its earth science library and earth science museum.

Participation in IGCP involved programme 512 on Neoproterozoic Glaciation. During the Annual General Meeting of the Organisation of African Geological Surveys, which was held in Windhoek in September, 2011, a new IGCP Project on the Seismotectonics of Africa was workshopped.

The Geopark project received some impetus from the Millennium Development Fund, but is still delayed due to a lack of relevant legislation.

The Executive Committee of the Geological Society of Namibia serves as the National Committee of IUGS as well, since it is the representative body of the Namibian geoscience community. As usual, the Executive Committee organized a number of talks, excursions and courses.

55. **NETHERLANDS** – No report.

56. **NEW ZEALAND** - Rapporteur Alberto Riccardi

The Geoscience Society of New Zealand (GSNZ), Inc. Is a non-profit charitable organization that is also a constituent, affiliated body of the Royal Society of New Zealand. The GSNZ also operates the GSNZ Awards Trust, which provides grants for a number of the Society's awards.

There are 14 members on the GSNC of which 11 are elected officials, 2 ex-officio, and 1 professional administrator. Dr. Scott Nodder, President of the GSNZ prepared and submitted the annual report to the IUGS. He can be reached at the C/- National Institute of Water & Atmospheric Research (NIWA) Ltd. Private Bag 14-901, Kilbirnie, Wellington 602, New Zealand <Scott.nodder@niwa.co.nz>

The GSNZ meets four times during the year and the major issue was membership and subscription retention.

GSNZ major accomplishments included:

- Successful implementation of the 2010 amalgamation between the Geological Society of NZ and the NZ Geophysical Society.
- Response of the geoscience community to the Canterbury earthquakes.
- Introduction of a Young Researcher Travel Grant to enable young geoscientists to attend their first international conference (total value provided per year - \$5000).

The major activities of GSNZ included:

- Oversight of the organisation of the GSNZ annual national conference, this year held in Nelson, NZ, including several field-trips.
- Comments provided on developmental impacts on sites of geological and geophysical importance via the Geoheritage Subcommittee.
- Publication of a Newsletter, distributed to ~1000 members, three times per year.
- Maintenance of a website (www.gsnz.org.nz) that now has added functionality via a recent NZ Lotteries grant, which enables members to register on-line and for members of the public to make enquiries regarding geoscience phenomena and to purchase books, field guides, etc.

GSNC's recent geo-hazard interaction included:

- Canterbury earthquakes (September 2010, February 2011 – 181 people killed, and several thousand aftershocks).
- Severe flooding and landsliding, northern South Island (December 2011).

GSNC's known activities of other geology-related academic organization(s) in each country (Geological Society, Geophysical/Geological Union, etc.) included:

- Alpine Fault drilling (GNS Science, University of Otago, Victoria University of Wellington)
- IODP Hikurangi workshop and proposal – slow slip (GNS Science, NIWA)
- SAHKE - Seismic Array HiKurangi Experiment (GNS Science, Victoria University of Wellington)
- ANDRILL (Victoria University of Wellington, GNS Science, Antarctica NZ, NIWA)

In 2011, GSNZ members were recognized for their services to the community and to the geosciences:

57. **NIGERIA** – No report.

58. **NORWAY** – No report.

59. **PERU** – No report.

60. **POLAND** – Report received after the IUGS EC Meeting.

The Committee of Geological Sciences of the Polish Academy of Sciences (Komitet Nauk Geologicznych PAN) is the National Committee in Poland for IUGS. Actually, there are four commissions working within the Committee: The Commission on Stratigraphy, the Commission on Hydrogeology, the Commission on Tectonics, and the Commission on Geological Education. Their number may be subject to change.

In the year, 2011:

- The Committee started to collect data in order to prepare a document which is aimed at reviewing and assessing the present status of different branches of geological sciences in Poland.
- The Commission on Tectonics prepared a book “Regionalizacja Tektoniczna Polski,” published by the Committee, dedicated to the revision of nomenclature, terminology and regional subdivisions of tectonic units of Poland as presented on general overview maps and accompanying cross-sections. It was done for three structural depth levels after sequentially removing (1) Cenozoic, (2) Pwemo-Mesozoic, and (3) Devonian platform covers. Then basement units and the Carpathians were presented with the partly redefined subdivisions and boundaries.
- The Commission on Hydrogeology has been involved in the reevaluation of groundwater reserves in Poland.
- The Commission on Geological Education has been preparing a booklet under the working title “Geosystem” as part of an outreach activity.

In the year 2011, in Poland, 62 conferences, symposia, and workshops were organized of which over 20 were on an international level. They were concerned with basic geology, covering almost all geological disciplines, and with many practical aspects of geology such as groundwater, remote sensing, natural hazards, soils (geochemistry, pedology), oil geology, geology in underground mining, wastes, pollutants, ecology and environment conservation.

The National Committee for IUGS also cooperates with the IGCP. In 2011, over 30 Polish geologists were involved in IGCP Projects.

61. **PORTUGAL** – No report.

62. **ROMANIA** – No report

63. **RUSSIA** - Rapporteur Alberto Riccardi

The IUGS National Committee is the Russian National Committee of Geologists (Russian NCG), who works under the aegis of the Russian Academy of Sciences and includes thirty members from the Russian Academy of Sciences and industrial and educational organizations. During 2011 the Committee had four meetings.

The main activities of the Russian NCG were focused as usual on major policy and operational issues pertinent to IUGS bodies and affiliated organizations.

Thus, members of the Russian NCG participated in activities of the IUGS Commission on Geoscience for Environmental Management (GEM), INHIGEO, and the International Commission on Stratigraphy (ICS). With regard to IUGS affiliate organizations, members of the Russian NCG were involved in activities carried out by the International Association of Engineering Geology and the Environment (IAEG), the International Mineralogical Association (IMA), the Commission for the Geological Map of the World (CGMW), the International Association on the Genesis of Ore Deposits (IAGOD), the International Federation of Palynological Societies (IFPS), the European Association for the Conservation of

Geological Heritage (ProGEO), and the YES Network. There was also an active participation in the activities of the International Union for Quaternary Research (INQUA).

Russia was very active in relation to the History of Geological Sciences: a) supporting the initiative to establish the “Vladimir V. Tikhomirov, IUGS History of Geology Award” in recognition of the first INHIGEO President V.V. Tikhomirov (1915-1994); b) working in studies of the scientific heritage of the first Russian scientists M.V. Lomonosov (1711-1765); and c) participating in national and international conferences.

In relation to ICS, Russian geologists have been active in the Subcommissions on Ordovician (preparations for the 12th International Symposium and work related to sequence stratigraphy and sea-level changes), Jurassic (Toarcian, Callovian, Oxfordian, Kimmeridgian and Jurassic-Cretaceous boundaries), Paleogene (participation and publication at 18 national and international conferences, with 31 papers and 3 books published, main focus on events at the Maastrichtian/Danian, Paleocene/Eocene and Eocene/Oligocene boundaries) and Neogene. In addition Russian representatives have also participated in ICS discussions on different stratigraphic problems, such as development of national stratigraphic codes, reconstruction of the International Stratigraphic scale, compilation of regional stratigraphic scales of new generation, assessment of modern techniques to work up stratigraphic schemes, temporal and spatial correlations of different geological events, reconstruction of paleogeographic setting, etc. An English version of the Russian Stratigraphic Code was prepared for the forthcoming 34th IGC.

The Russian group of IAEG organized the International Conference “Environmental Geosciences and Engineering Survey for Territory Protection and Population Safety” which was held in Moscow on September 6-8, 2011. In March 2011 was held the All-Russia Scientific Conference with the topic “Engineering Geological and Geoecological Substantiation of Technologically Complicated and Unique Engineering Projects”. The IAEG awarded the Hans Cloos medal to Academician Victor I. Osipov.

Members of the Russian Mineralogical Society participated in IMA and were very active in their field. Since 2000 they have participated in the discovery of 172 new mineral species out of 762, followed by the Italians and U.S. scientists with 61 and 60 respectively. Four international meetings were sponsored in Russia during 2011.

Russian geologists lead 3 subcommissions of the CGMW (Northern Russia, Antarctica, Tectonic maps), which are actively preparing a number of maps. During 2011 it was compiled the “International Tectonic Map of the Arctic, scale 1:5M – TeMAR”, and several maps will be published for the 34th IGC. In relation to IAGOD two international conferences were held during 2011, “Large igneous provinces of Asia: mantle plumes and metalogeny” held in Irkutsk on 27-28 August and the “2nd International Geology and Mining Forum Gold of the North Pacific Rim”, held in Magadan on 3-10 September.

The Russian Palynological Commission, which consists of 230 palynologists, organized the XIII Russian Palynological Conference on Sept. 5-8, and Russian palynologists participated in several national and international conferences. The Directory “Palynologists of Russia and CIS countries” in English has been edited for the next IGC.

Russian scientists have been very active in relation to geoheritage and ProGEO activities, circulating information, organizing workshops, updating Russia's data base of geosites, investigating geosites, and developing activities directed to conservation of geosites.

In relation to Young Earth Scientists, Russian young scientists will participate in the Second YES World Congress.

In addition members of the Russian NCG were active in INQUA's commissions, subcommissions, and committees, attending the XVIII INQUA Congress which was held in Bern, Switzerland.

Based in part of the information received from IUGS and its bodies the Committee has compiled an information Bulletin, which was circulated among c. 100 academic, industrial, geoscientific institutions and universities throughout Russia.

In spite of a difficult financial situation, the Russian NCG has managed to arrange the 2011 EPISODES subscription (57 copies) for individuals and organizations (all free of charge). The inability of the Russian Academy of Sciences to pay in time the annual membership dues to IUGS and its Affiliates considerably influenced the Committee's activity. Although this year due to the Russian NCG efforts the Russian Academy of Sciences has transferred its fees to the International Union of Geological Sciences, the Commission for the Geological Map of the World, the International Union for Quaternary Research.

64. **SAUDI ARABIA** – No report.

65. **SERBIA** – No report.

66. **SLOVAKIA** – Rapporteur Ezzoura Errami with review by William Cavazza

The report listed the most important activities of the Slovak geologists organized under the umbrella of the Slovak Geological Society or NGCS. The International events are PetroS 2011, 9th Slovak Geophysical conference, 12th Czech – Slovak & Polish paleontological conference 2011, 2nd field hydrogeological seminar, Geochemistry 2011. Slovak Geological Society participated also to numerous national events in Slovakia (10th Christmas Seminary (Bratislava), the geological excursions to the Malé Karpaty Mts., to Hundsheim hills and to Western Carpathians Unit).

The Slovak Geological Society participated in organising numerous foreign events such as the 9th CETeG 2011 in Skalsky Dvur (Czech republic), the Hutton 7th International Symposium on Granites and Related Rocks held at Avila (Spain), the open congress of Czech and Slovak Geological societies (Moninec), the petrological excursion to Western Tatra Mts. in Slovakia for participants of the 8th meeting of petrological group of the Polish Mineralogical society in Bukowina Tatranska, the Jurassica 9 – Slovak-Polish conference on Jurassic research (Malogoszczzi), Tatrzańskie Warsztaty Geologiczne –Slovak-Polish cooperation on geological research in the Tatra Mts. (Zakopane).

67. **SLOVENIA** – Rapporteur Mirka Trajanova

President Alberto Riccardi thanked Mirka Trajanova for attending the meeting and for reporting on Slovenia.

The Geological Survey of Slovenia, Geological Society of Slovenia and there is no formal National Committee.

The major accomplishments of the geological organizations in Slovenia are: Geological organizations in Slovenia are: Geological Survey of Slovenia, Faculty of natural sciences and technology - Department of geology and ZRC SAZU - Scientific Research Centre of the Slovenian Academy of Sciences and Arts. Let me first introduce shortly Geological Survey of Slovenia (GeoZS).

Activities of GeoZS are based on National research programmes financed by Ministry of high education, science and technology, and on national projects financed by Ministry of the environment and spatial planning and Ministry of the economy. Additional income is obtained on open market through tenders and direct contracts.

In recent years more and more stress is laid in international, European projects. At the present we are participating in 12 projects as follows: SARMa (as a leading partner), INCOME, EO-MINERS, I2GPS, EuroGeoSource, TransEnergy, Safe Land, PanGeo, GEO.POWER, InGeoCloudS and ASTIS as a project partner. In connection with the projects, several workshops were organized. Major activities included a large number of international symposium, workshop, outreach activities, hosting international/national meetings.

The Faculty of natural sciences and technology, Department of geology performs its educational programme at the following cathedras:

- Cathedra for mineralogy, petrology, and materials (KMPPM)
- Cathedra for applicative geology (KAG)
- Catherdra for stratigraphy, paleontology and regional geology (KSPRG)

Besides, research work is becoming more and more important from year to year. The work is based on national programmes and international projects. Wide international cooperation is organised through Erasmus and CEEPUS programmes.

ZRC SAZU Scientific Research Centre of the Slovenian Academy of Sciences and Arts consists of several institutes, two of which treat geological problems: the Ivan Rakovec Institute of Paleontology and the Karst Research Institute. .

Activities of Slovenian Geological Society:

- Organization of lectures opened to public, expert excursions, exhibitions and scientific meetings. Promotion of geology and incorporation of geological science into elementary and secondary school programmes,
- Cooperates actively in environmental protection and in preparation of legislation and norms for the field of geology,
- Cooperation with other societies in Slovenia and abroad, member of international organizations (IUGS, EFG, IMA, ProGeo).

Five sections are active in the society; *section for geochemistry, section for sedimentary geology, section for mineralogy, section for geological heritage and student's section.*

68. **SOUTH AFRICA** - No report.

69. **SPAIN** – Rapporteur Carlos Martinez Navarette

Carlos thanked the EC for the warm reception and the opportunity to host the 63rd IUGS EC Meeting.

The Spanish National Commission of Geology (NCG) was created in 1957 and reorganized by Presidential order on February 28, 2003. Among the aims and functions of the National Commission of Geology, as defined in its creation bill, we can highlight the following:

- To promote, boost and support the coordination of research, studies and geological and geothematic cartographies, scientifically validating those undertaken by the Geological and Mining Institute of Spain, as well as those of other official bodies and organizations belonging to the administrations applying for them.
- To inform the General State Administration, the Spanish Autonomous Communities and other public and private bodies on geological issues.
- To promote the rapprochement and collaboration between scientists in the scope of Geology within the country, fostering information and communication.
- To promote and coordinate the participation of Spanish research groups in international programmes, serving as a link between the Spanish scientific community and international organizations related to Earth Sciences.
- To represent Spain in international meetings and forums (IUGS, International Geological Congress, etc.) held in the scope of Geological Sciences.
- In general, to promote and propose all those activities (scientific congresses and meetings, cooperation agreements, etc.) related to the promotion, guidance and scientific spreading of Geological Sciences in Spain.

The NCG structure consists of a General Assembly (formed by 23 renowned scientists, representing all the Spanish Administration departments, University departments and Scientific Societies sharing an interest on the Earth Sciences), a Permanent Executive Committee (formed by 6 members of the General Assembly) and three sub commissions: i) Sub commission on Geological and Geothematic Mapping; ii) Sub commission on External Relationships; and, iii) Sub commission on the IGCP.

The most relevant activities carried out during 2011 may be outlined as follows:

- Renovation of membership on course Due to the termination of the maximum mandate of its members in December 2011, (2 periods of 4 years) and the change of IGME's Director and President of the National Commission of Geology, Dr Rosa de Vidania Muñoz, the CNG has started the renewal of its membership and of its Permanent Executive Committee.

To date the CNG has renewed the posts of President, Vice-president, Secretary and 7 members. There is a proposal of new 12 members and substitutes by the various ministries and institutions represented in the Commission, and we are still waiting proposals from the Ministry of Agriculture, Food and Environment as well as from the Council of Universities for further appointment by the Ministry of Economy and Competitiveness.

- The Secretary attended in February the 50th Anniversary of IUGS event, in Paris and the 62rd annual meeting of the IUGS Executive Committee.
- The NCG attended the annual meeting of the Spanish Commission of the International Council for Science (ICSU) and presented several papers about the NGC and IUGS at the Ministry of Science and Innovation.
- The NGC also attended the meeting of the Spanish National Committee of the International Geosciences Programme (PICG) (of the International Geosciences Programme sub-commission (IGCP), of IUGS). The meeting was celebrated at IGME premises in Madrid.
- The NGC has drafted and presented the Spanish bid for the organization of the IGC-2020 (36th International Geological Congress 2020. Bid Document. San Sebastian, Spain), which was presented in October 2011.
- The NGC is organizing with the Regional Government of Gipuzkoa (logistics and field trips) the 63rd IUGS Executive Committee meeting in 2012 in San Sebastian, (Spain)
- Maintenance of CNG web page
- Drafting the Annual Report of the NGC for the IUGS Madrid, January 25, 2012

70. **SRI LANKA** – No report.

71. **SUDAN** – No report.

72. **SWEDEN** – No report.

73. **SWITZERLAND** –

The Switzerland National Committee is comprised of seven members.

One Swiss Geoscience Meeting was scheduled that had to be cancelled at the last minute.

The Committee's activities have been greatly reduced relative to the past years. Our very limited funds were directed to:

- An update of the web site of the Swiss Stratigraphic Committee.
- The organization of a special symposium on "Alpine Sedimentology" in honor of A. Matter and D. Bernoulli, in the framework of the Swiss Geoscience Meeting in Zurich (on November 13)

There are no geohazards to report for Switzerland.

There are many geoscience-related organizations in Switzerland, that are active on different levels

74. **SYRIA** – No report.

- 75. **TAIWAN** – No report.
- 76. **TAJIKISTAN** – No report.
- 77. **TANZANIA** – No report.
- 78. **THAILAND** – No report.
- 79. **TURKEY** – No report.
- 80. **UGANDA** – No report.
- 81. **UNITED KINGDOM** – Rapporteur Alberto Riccardi

The Geological Society of London (GSL) (the External Relations Committee of the Society acts as the National Committee). The Geological Society is the national learned and professional body for geoscientists in the UK. Of its 10,000 members, around 20% live overseas. The Geological Society is incorporated by Royal Charter granted by George IV in 1825 and is a Registered Charity (210161). It is independent of Research Councils, the Royal Society (the National Academy for the UK), etc.

The External Relations Committee (ERC) has 12 members, 5 of whom are members of the Society's Council, drawn from academia, industry and government. In addition, 4 staff members regularly attend ERC meetings.

The Committee held 4 meetings in 2011.

The major issues of the current committee are as follows:

- 'Science for Policy' - delivering relevant and high-quality expert input from the geoscience community to inform policy-makers and other non-technical stakeholders, in areas such as radioactive waste disposal, CCS (Carbon Capture and Storage), unconventional hydrocarbons, climate change, water and mineral supply.
- Understanding present and future national geoscience skills needs, and promoting the 'case for geoscience' to policy-makers and to funders of teaching and research, based on secure evidence of requirement.
- UK Geoparks, Geoconservation, and appropriate support roles for the Geological Society.
- A longer term ambition is to develop our capacity building activities in developing countries.

The committee's major accomplishments in 2011 were as follows:

- A Geological Society Climate Change Statement was published late in 2010. This has been very well received and has impacted on policy discussions in government. A briefing document on Rare Earth Elements was published in November 2011, and further policy statements and briefing notes are planned.
- The Geological Society responded to 12 government consultations and parliamentary inquiries during the year.
- The Society launched a Higher Education Network, and an Environment Network. They are expected to be active online communities, as well as running traditional conferences and workshops.
- The Society launched a blog and its own YouTube channel during 2011, as well as actively building its presence on Twitter and Facebook.

Major activities included international symposium, workshop, outreach activities, hosting international/national meetings.

- The Society has worked closely this year with the British Geological Survey (BGS) and the

Committee of Heads of University Geoscience Departments (CHUGD) to advance the 'case for geoscience' to policy-makers and to funders of teaching and research. There have been early successes, and the work continues. It has also worked with the Petroleum Exploration Society of Great Britain and the British Geophysical Association in this regard.

- The Society has supported the work of Rockwatch, the junior club of the Geologists' Association (GA) aimed at children and their families, both financially and in promoting their programme of activities. Alongside its regular programme of meetings and field trips aimed principally at amateur geologists, the GA held a successful conference on geoconservation, bringing together the academic and voluntary geoscience communities.
- The British Geological Survey has played a leading role in the One Geology global mapping project, among many other successful projects.

The committee's achievements include the Geological Society's Frontiers Meetings, the first of which was held in November (see item 9 bullet point 6), constitute a novel and valuable model for engaging the next generation of geoscientists, which would be of interest to an international audience.

We would be delighted to provide a report on the meeting for Episodes, exploring both the challenges of engaging this community which we were seeking to address with this and future events, and the science which was presented and discussed.

GSL's direct relation with IUGS, executive members in the IUGS council include Professor Iain Stewart, a member of ERC (the UK National Committee), is a member of the IGCP Scientific Board. Laurance Donnelly, Chair of the IUGS Forensic Geology Initiative, is also Chair of the Forensic Geology Group of the Geological Society.

The Geological Society has been working with the GSA, AGI and BGS to promote the concept of a Global Geoscience Initiative (GGI). This is intended to stimulate collaborative working among geoscientists from many countries, to tackle a research challenge of global significance. It will only succeed if it commands grass roots support and is eventually owned and taken forward by the international research community. We believe that it has the potential to:

- attract new and significant amounts of research funding from a range of providers
- make a valuable contribution to science and to addressing 'grand challenges' such as those identified by ICSU in its Earth System Sustainability Initiative
- contribute to geoscience capacity building in developing countries

The Committee hopes that the IUGS will embrace this initiative, and will work actively with our organizations to bring it to fruition. The Committee also welcomed the helpful template provided for this year's report.

82. UNITED STATES – Rapporteur Wesley Hill

United States National Committee for the Geological Sciences (USNC IUGS)

Background

The U.S. National Committee for the Geological Sciences (USNC/GS) of the U.S. National Academy of Sciences promotes the advancement of geological sciences in the United States and throughout the world, and effects participation by the U.S. scientific community in the activities of the International Union of Geological Sciences (IUGS). The U.S. National Committee serves as a focal point for U.S. discussions on how to best maintain the viability and relevance of the geological sciences internationally. The committee provides guidance and input to IUGS on these issues, and plans and implements U.S. participation in furthering the goals and work of the IUGS. The USNC works in cooperation with scientific societies and seeks their input on nominations to the committee. The USNC meets twice a year, in the Spring and in the Fall. The U.S. National Committee is made up of earth scientists from State and Federal governments, academia, professional societies, and the private sector. USNC Chair is Thomas

Casadevall of the U.S. Geological Survey.

IUGS Involvement

The USNC enjoys a solid relationship with IUGS. Paul Kay, Deputy Secretary General of IGC, gave an update at the Fall meeting on preparations for IGC. Several U.S. scientists are in positions of leadership within IUGS. Wesley Hill is an IUGS Councilor 2010-2014 term; Eldridge Moores (University of California, Davis) and Patrick Leahy (AGI) are part of the IUGS/IGCC task force charged with preparing new versions of the IGCC and IUGS Statutes and Bylaws; Stanley Finney (California State University, Long Beach) is the Chair of the IUGS' International Commission on Stratigraphy; and Fred Spilhaus is the Chairman of the IUGS' Publications Committee.

Since January 2010, the IUGS Secretariat has been hosted by the U.S. Geological Survey and is financially supported by the US Government and IUGS. The head of the IUGS Secretariat office is Rich Calnan, assisted by Nancy Ziegler; both are USGS employees.

USNC Priorities

The USNC has identified three main pillars for their activities in the current triennium: (1) science diplomacy through the Earth sciences, (2) strategic and critical mineral resources, and (3) Earth science education. Complete details of activities within the three priority areas are listed in the 2011 full Annual Report. The USNC is also active in assisting and supporting U.S. efforts in joining the Global Geoparks Network.

IGCP

Members of the USNC serve on the scientific review board for IGCP. The USNC publicizes IGCP grants throughout the geological community and encourages applications through its website. A subcommittee evaluates IGCP proposals and issues letters of recommendation to the IGCP Secretariat.

IGC Brisbane 2012

The USNC has collaborated with the GSA Foundation, AGI, and Shell Oil Company to organize an early career scientist travel grant and mentoring program for attendance at IGC 2012. USNC members will serve as evaluators. This grant program has a mentoring component as for many of these young scientists, it will be their first international meeting and it is important to offer guidance and inform them about the USNC, the importance of science policy, and the importance of U.S. and international scientific organizations.

The understanding between the Head Department of Geology under the Government of Tajikistan and Geological Services of Finland on preparation phase of the project on the Development and improvement of the information systems in the Geological sector of Central Asian Countries».

Five persons will be attending the IGC meeting. They are interested in obtaining information on grants available on capacity building for young scientists and modernization of equipment.

83. **UZBEKISTAN** – No report

84. **VIETNAM** - No report

85. **YEMEN** - No report

- **ACTION ITEM # 26.** President Alberto RICCARDI to respond in writing to all of the Adhering Organization regarding the individual the annual reports.

5.f. AFFILIATED ORGANIZATIONS

5.f.1 Criteria for admission (Alberto Riccardi)

Guidelines to assess the Active-Inactive status of Affiliate Organizations.

Background

The IUGS Statutes state: that *“Affiliated organizations are international, non-governmental, scientific, autonomous organizations which have obtained affiliation with the Union for the representation of scientific interests and, through the Union in the International Council for Science, for collaboration in arranging scientific meetings, and for planning and undertaking activities of mutual interest”* (Definitions # h), that *“Active international or multinational scientific organizations may apply for affiliated status, if they are willing to support the aims and objectives of the Union. Applications are considered by the Executive Committee. Approval of an application is subject to ratification by the Council”* (Statutes # 53), that *“as appropriate, affiliated organizations shall be supported by the Union in matters of international and interdisciplinary cooperation. The Union may give, within the limits set by a fair distribution of its resources, financial support to the activities of affiliated organizations”* (Statutes # 54), and that *“The Council, on recommendation of the Executive Committee, may dissolve the affiliation of an organization which has been inactive for a period of over two years”* (Statutes # 55).

The IUGS Bye-Laws state: that *“A representative appointed by each affiliated organization and accredited by it to the Secretary General is entitled to take part in meetings of the Council, but without vote. The Executive Committee may invite representatives of the affiliated organizations to take part in other deliberations of mutual interest, and the affiliated organizations may take the initiative in proposing such deliberations”* (Bye-Laws # 29), and *“Each affiliated organization is expected to submit to the Executive Committee annual reports on its activities. The Secretary General may distribute such reports within the Union as appropriate and practical”* (Bye-Laws # 30),

Recommendation No. 26 of the Strategic Action Plan approved in the year 2000 stated that *“Current arrangements between the IUGS and its Affiliated Organizations are thoroughly unsatisfactory and should be drastically revamped. The present arrangements confer little benefit on the IUGS and even less on the Affiliates. New and financially more realistic arrangements are required, for example, to involve Affiliated Organizations (albeit on a rotational basis as funding permits) in joint scientific endeavors with the Union. Other avenues of involvement of the Affiliates should also be investigated”*.

On that basis on September 2008 the IUGS EC established a set of guidelines to improve interaction of IUGS with affiliated organizations. Among other objectives it was considered important that: 1) Websites of Affiliate Organizations should be linked to IUGS website and to the websites of the IUGS National Committees and vice versa; 2) IUGS National Committees should establish an informative and, if possible, working contact with Affiliate Organizations; 3) Affiliate Organizations should provide advice and input on the work being carried out by the different IUGS Commissions and Task Groups; 4) Affiliate Organizations to interact, if appropriate, with IGCP projects; 5) Affiliate Organizations should provide IUGS with information about all their events, which should be included in an IUGS calendar of events to be made available worldwide; 6) Affiliate Organizations should disseminate all pertinent information provided by IUGS and the IUGS National Committees; 7) Affiliate Organizations should provide information for the IUGS E-Bulletin; 8) Affiliate Organizations should publish in Episodes on their IUGS related activities; 9) Affiliated Organizations should provide advice or input on their specific fields, for improving IUGS cooperative activities with international organizations such as UNESCO, ICSU, Geounions, etc.

In addition on February 2011 the IUGS EC approved a set of guidelines for admission to the category of Affiliated Organization.

General strategy

From the above background it is evident that one item yet to be defined is related to when an Affiliated Organization should qualify as inactive in the terms of Statutes Article #55.

Recommendations

1) Any Affiliated Organization will be considered as inactive if in a period of over two years has not submitted to the IUGS Executive Committee an annual report on its activities or has not complied with at least two of the following requirements:

- a) Website linked to IUGS website;
- b) Provided advice and input on the work being carried out by an IUGS Commissions or Task Groups;
- c) Interacted with an IGCP project;
- d) Provided IUGS with information about its own events;
- e) Provided information for the IUGS E-Bulletin;
- f) Published in Episodes on its IUGS related activities;
- g) Provided advice or input on its specific fields of activity, for improving IUGS cooperative activities with international organizations such as UNESCO, ICSU, Geounions, etc.
- h) Participated or interacted with an activity directly related to IUGS current activities.

2) Once the IUGS EC has determined that an IUGS affiliated organization has remained inactive on a period of over two years it will inform the organization on its inactive status and on IUGS Statutes provisions.

3) If there is not satisfactory response from the inactive organization in the next six (6) month the IUGS EC will recommend the Council to dissolve its affiliation

The EC approves the Guidelines

5.f.2 Applications for Affiliation - None received.

5.f.3. Reports from Affiliated Organizations

1. Association of Applied Geochemists (AAG) – Rapporteur Sampat Tandon

For 2012 and 2013, the new President of AAG will be Robert Eppinger of the USGS, Denver, Colorado, U.S.A. The Association has an eleven-member board of Councillors in addition to Regional Councillors, who represent the British Isles, Europe, South Africa, Brazil, Chile, South Asia and China. In August, 2011, AAG hosted the 25th International Applied Geochemistry Symposium in Rovaniemi, Finland. This was jointly organized by the Finnish Association of Mining and Metallurgical Engineers, the Geological Survey of Finland, and the University of Oulu, and was attended by 390 participants from 45 countries. Sessions at the Symposium, included:

- (a) Advances in analytical geochemistry
- (b) Applied biogeochemistry
- (c) Catchment scale geochemical mapping
- (d) Advances in exploration isotope geochemistry
- (e) Organic geochemistry
- (f) Geochemical exploration and mineral prospecting in GIS
- (g) Predictive geochemistry in arid areas of transported overburden and mechanisms of anomaly formation
- (h) New and old discoveries: geochemical exploration case histories
- (i) Applied aqueous geochemistry

The following workshops were also given at the Symposium

1. Quality assurance in geochemical analysis
2. Geochemistry of risk assessment of metal-contaminated sites
3. Indicator mineral methods in mineral exploration
4. Prospecting mapping in GIS integrating geochemistry data with geophysics and geology
5. Exploration for orogenic gold deposits – with emphasis on geochemical exploration in glaciated Precambrian terrain

The Association's Gold Medal for outstanding contribution in Applied Geochemistry was awarded to Dr. Eion Cameron (Geological Survey of Canada, retired). The Association sponsors the publication of the Journal of Geochemistry: Exploration, Environment, Analysis in partnership with the Geological Survey of London, and also publishes a quarterly newsletter EXPLORE. AAG also produces special publications and conducts short courses in the area of applied geochemistry.

2. American Association of Petroleum Geologists – No report received

3. African Association of Women Geoscientists (AAWG) Rapporteur: Ezzoura Errami

AAWG count 400 members from 32 countries. It is communicating with its members by a yearly newsletter entitled "Women & Geosciences News". During 2011, a new AAWG website was designed where the IUGS logo is highlighted. Since 2011, the AAWG became an associated organization to Geosciences InfoRmation in AFrica (GIRAF).

In order to promote the new project of the AAWG, the African Geoparks Network, many presentation were given in different events (62nd IUGS annual meeting held at Paris (France); Information meeting with UNESCO delegates and obserers about the geoparks activities of UNESCO held at Paris (France); Royal Agriculture College Students Conference (UK); Regional conference entitled "Leveraging best practices to accelerate quality improvement in teaching, learning and research in Higher Education in Africa" and formal launch of UEMOA-funded project of UNESCO Bamako Cluster Office (Mali); Workshop on "Cultural landscapes" organized by Euromed Heritage 4 and the Ministry of Culture of Tunisia, Hammamet (Tunisia). In order to promote the Geopark concept on the African continent and also to build the capacity of local community, a mission was organized to Tunisia where many meetings were held with representatives of local communities, associations and responsables. One day field trip was organized to Zaghoun aspiring geopark. A website dedicated to the AGN and its activities was created.

The AAWG was represented in the capacity building workshop on Skills development in preparing project applications for IGCP (Nairobi, Kenya) and in the World Heritage workshop aimed at strengthening the technical networks of the Advisory Bodies, to support the identification, evaluation and conservation of World Heritage properties organized by IUCN in Mombasa.

An Ivorian professor spent 3 months in Tunis El Manar University where a huge micropaleontological research had been done on the Fresco Escarpment, an aspiring geopark in Ivory Coast. Two young researchers from Ivory Coast and one from Cameroon are supported by our AAWG EC members.

During 2011 two main activities were conducted by the Association: 1/ A workshop, entitled « Earth Sciences Education in primary and secondary schools and its adaptation to Higher Education programs », was organized on the 29 June 2011. During that workshop, the AAWG Cameroon was launched officially. 2/The First International Conference on African & Arabian Geoparks entitled "Aspiring Geoparks in Africa and Arab world", 20-28 November 2011, El Jadida, Morocco. This conference received 87 abstracts representing 39 countries and was attended by 100 delegates representing 31 countries from the five continents. Many international organizations were represented during the conference: UNESCO, GGN, EGN, Chinese Geoparks Network, GSAf, GSR, USGS, CoGE-IUGS, Geoheritage Task Group-IUGS, YES Network, Earth Science Matters Foundation...etc. The conference started by a pre-conference short course on geoconservation and geoparks g, two days technical sessions, two roundtables and two business meetings. One roundtable focused on "Role of women and youth in the conservation of natural heritage" co-moderated by AAWG and YES Network. The second roundtable was dedicated to UNESCO and IUGS-COGE initiatives on geo-education in Africa. The conference ended by a 6 days field trip. The event was well advertised by a number of national and international organizations through their websites and by numerous national newspapers and radios.

AAWG is organizing its 6th conference entitled «Women and Geosciences for African Integration» in Yaoundé (Cameroon), from the 23rd to 27th April 2012. They are also co-organizing with YES Network a roundtable on "Women in Geosciences" during the 2nd World Congress of the YES Network, Brisbane (Australia). An AAWG member is co-convening the AGID symposium entitled « Role of Women

Geoscientists in Resource Development” organized during the 34th IGC. AGN & AAWG are organizing in 2012 two workshops one in Zaghuan aspiring Geopark (Tunisia) and one in Dakar (Senegal).

A financial report, related to the use of the funds provided by IUGS during 2010 and 2011, is given. AAWG is requiring the same budget as last year.

4. Association of European Geological Societies (AEGS) - No Report Received

5. Arab Geologist Association (AGA) - Rapporteur: Alberto Riccardi

The report, submitted by Sarmad Shaker Mhmood, AGA’s Secretary and President of the Iraqi Geologists Union, deals with both the Arab Geologist Association and the Iraqi Geologist Union.

There were ten meetings held during the year and the major issue of the current leadership is “The Professional allocator”. Major accomplishment during 2011 was the publication of the Iraqi Geological Journal. Major activity was the 10th Jordanian Geological Conference held on 3-5- April 2011. Number of people who intend to participate in IUGS-IGC meeting in Brisbane next August is one.

Sarmad Mahmood was in attendance and was welcomed by President Alberto Riccardi and the EC. It was noted that Iraq has an inactive adhering body. Sarmad reported that he is affiliated with a union which sometimes makes it difficult for him to participate in certain activities.

6. AMERICAN GEOLOGICAL INSTITUTE (AGI) - Rapporteur: Colin Simpson

During the year the AGI changed its name from the American Geological Institute to the American Geosciences Institute to fully recognizes the breadth of the activities of the profession and the AGI Federation. The AGI is a non-profit organization that aims to voice the shared interests of the geoscience community (geologists, geophysicists, and other earth and environmental scientists) (<http://www.agiweb.org/>). It provides professional and information services related to government affairs, outreach, human resources, scholarships, and plays a major role in strengthening earth-science education. It supports its programs and initiatives through sales of its publications and services, royalties, contracts, grants, contributions, and affiliated society dues.

The AGI is a very active organization which continues to expand its activities especially in education, and in making relevant geoscience information available to researchers, the public, and government decision-makers. The AGI now has 50 geoscientific and professional associations including The Young Earth-Scientists (YES) network.

AGI leadership is launching an important initiative to raise funding for the new AGI Center for Geoscience Education and Understanding. The Institute hopes to further strengthen its education programs and launch new Geoscience Critical Issues Forums. Additionally, through their Foundation, AGI is creating a graduate school scholarship for females in the geosciences. In association with the Geological Society of America Foundation, the U.S. National Committee for Geological Sciences of the National Academy of Sciences, and Shell Inc., AGI has announced a travel grant and mentoring program for students and early career geoscientists who are in, or employed at, U.S. institutions. The program includes travel grants to the 34th IGC.

The AGI website lists all of the geoscientific and professional associations it has, however as was noted in 2011 there is no mention that the AGI is an affiliate of the IUGS. While a search within the AGI website came up with a lot of references to the IUGS (from within its information storage), a direct reference to, or link to the IUGS website from any part of the AGI website could not be found.

7. Association of Geoscientists for International Development (AGID) - Rapporteur: Wesley Hill

The Association of Geoscientists for International Development is a non- governmental organisation affiliated to the International Union of Geological Sciences.

Summary of Activities in 2011

Several AGID officers were invited by the organising committee of the 2012 IGC to act as coordinators of IGC Theme 2 and consequently a considerable amount of effort in 2011 was expended on establishing the framework for eight seminars to be held under that theme as detailed later in this report. In addition a successful international meeting on Geoethics was held as part of the Mining Pibram Symposium and further progress was made in Africa (Nigeria) with the AGID schools initiative, "The Earth and Me". Several editions of Geoethics News and the AGID Geoscience Newsletter were issued during the year. Drafting of a proposed new constitution for the organisation, more suitable for the current decentralised structure of AGID, is in progress and will be completed early in 2012.

Detail of Individual Activities in 2011

1. AGID and IGC Brisbane

Four AGID officers are respectively acting as Coordinator (Mike Katz) and Co-Coordinators (Afia Akhtar, Shrikant Limaye and Tony Reedman) of Theme 2 (Geoscience Benefiting Low-Income Countries) at IGC2012 in Brisbane and much effort in 2011 was put into developing and agreeing the theme outline and arranging convenors for the eight proposed symposia under Theme 2.

The Theme recognises the importance of creating social awareness and capacity building in low income countries, in relation to groundwater management and rural health; geohazards; climate change; medical geology for human survival and welfare; geoplanning for urban development and infrastructure; role of geosciences in protecting ecosystems; geoethics; role of women geoscientists in resource development; construction and industrial minerals; production of mineral and energy resources.

2. Africa: AGID's "The Earth and Me" (TEAM) Project for Schools in Nigeria

The AGID TEAM Project is designed to spread practical knowledge about geoscience and its relevance to daily life amongst schoolchildren in low-income and developing countries. Pilot projects are running in Nigeria and in Bangladesh.

Despite these challenges, some level of activity proved possible in some states of the north, namely the middle belt States of Kwara and Kogi states. This was mainly as a result of the participation of the local chapters of the Nigerian Mining and Geosciences Society (NMGS) which has become involved in the TEAM programme as reported last year. Fifteen secondary schools were visited in Ilorin and six in Offa towns while eight nursery and primary schools were visited, all in Kwara state. A very interesting and positive development was the special interest shown by the teachers in those schools visited and three teachers actually joined the team in subsequent visits to other schools. This augurs well for the sustainability of project achievements.

3. Extending AGID contact in Africa

Also this year, due to the interest and research activities of colleagues in South Africa, especially Prof. G.E. Ekosse (who is a life member of AGID) and his team, AGID in Africa (through AGID Vice President Gbenga Okunlola) was invited to participate in a survey and study of the geophagia phenomenon in Africa. Several AGID members responded in Nigeria and took part in studying this interesting phenomenon of eating clay, a common practice among pregnant women and tribes in Africa. The composition, and health effects of the sampled geophagic clays were studied and results presented at the 1st Clay and 2nd Geophagia Clay Conference in Africa in October 2011. Six AGID members from Nigeria attended this conference in Free state University of Technology, Bloemfontein, South Africa. It afforded many AGID members from six countries in Africa, namely Nigeria, South Africa, Ghana, Cameroon, Botswana south Africa, the opportunity to meet for the first time in many years of AGID membership, especially since the 1975 conference in Kano, Nigeria. It was agreed that modalities be drawn up for continual consultations and collaboration. The TEAM project in Nigeria was also introduced to these

members and the template was made available to them for possible adoption in their countries.

AGID Working Group on Geoethics

Dr Vaclav Nemecek (Vice President, AGID) is leader of the AGID Working Group on Geoethics, a growing focal point of AGID activities, and is also a convenor of the International Section on Geoethics at the regular Mining Příbram Symposium.

On October 10 – 14, 2011 the traditional International Section on Geoethics was hosted by the 50th Jubilee Mining Příbram Symposium as a regular meeting of the Working Group for Geoethics (operating since 2004 under the umbrella of the Association of Geoscientists for International Development) and convened since 1992 by Dr. Václav Nemecek (AGID Vice-president) and by Dr. Lidmila Němcová (President of the Czech Society for Ethics in Economics).

Representatives from following 12 countries were present: *Algeria, Brazil, Czech Republic, P.R. of China, France, Japan, Germany, Poland, Russian Federation, Senegal, Spain, United Kingdom*. For unexpected reasons (mostly health problems) the following persons had to cancel their participation but sent their greetings to the meeting: the IUGS Vicepresident Prof. Ochir Gerel (*Mongolia*); the former Division Director, UNESCO Dr. Kaisa Savolainen (*Finland*); the former frequent participant Prof. Azimkhan Kurmankozhaev (*Kazakhstan*). Short communications from Anesti Qirinshi/Kirintzi (*Albania/Greece*) and Jennifer Joi Field and Prof. Joe Remenyi (*Australia*) were printed.

More than sixty delegates were present at the meetings on geoethics and the total number of printed contributions was 29 with 24 oral presentations. This session built further on its past development; international meetings on Geoethics have been held in 11 sessions of the Mining Příbram Symposia (regularly since 1992) and a total of 287 written contributions from authors of 29 countries have been published. Since 2005 these meetings have been serving as a basis for the AGID Working Group for Geoethics.

This year several topics of special interest were presented and discussed.

Within the AGID Working Group there was also some discussion of possible structures for developing the topic of geoethics through IUGS. Since 2004 AGID has been the only organization affiliated to IUGS that has offered continuous activities focused on the topic 'geoethics' (mainly through its Working Group for Geoethics and regular international meetings at Příbram, GEOETHICS NEWS and web pages http://tierra.rediris.es/Geoethics_Planetary_Protection/).

AGID Publications

The AGID Geoscience Newsletter continues to be produced and distributed for a 25th year due to the continued dedication of its editor, AGID past President, Shrikant Limaye. Number 61 was published in June and 62 in December, 2011, and is being distributed to over 700 recipients around the world.

GROWNET Website

The IGCP Project 523 (GROWNET) was mainly concerned with constructing a website with examples of best practice in groundwater development projects in low-income countries. AGID past President, Shrikant Limaye, was the principal initiator and scientific manager of the successful project which officially ended in 2009 though maintenance of the website continues and has attracted more than 16000 visitors. AGID will provide the modest funding needed for its continued development and maintenance.

AGID Budget and IUGS Grant

AGID gratefully acknowledges the grants of \$1000 that AGID has received annually from IUGS over the last few years. None of these funds have been spent on administration but used solely to support AGID activities such as, for example, the TEAM project described above. Some support may be necessary in the coming year to extend the TEAM project to other West African countries and also maintain distribution of the Geoscience Newsletter. Also ways of extending the geoethics network, particularly within and to low-income countries, are being explored and will hopefully be further developed during IGC2012. For all such work a grant to AGID of a total of \$2000 is respectfully requested for 2012.

8. American Geophysical Union (AGU) - Rapporteur: Colin Simpson

The AGU organized 4 major meetings in 2010, three of which – (2 in USA, 1 in China) experienced significant growth in attendance over previous years. They also had 4 leading-edge Chapman Conferences. They provided 165 student travel grants to their Annual USA meeting).

The AGU produces 19 professional journals. Journal Citation Reports ranked *Paleoceanography* the No.1 for the fifteenth consecutive year. Their *Geophysical Research Letters* and *Journal of Geophysical Research-Atmospheres* both ranked among the top 10 of the most highly cited research publications on climate change over the past decade. The AGU conducted a comprehensive marketing campaign to expand the reach and number of subscriptions for AGU publications, especially in emerging markets. Their highest number of new sales was in Asia, India, Russia, and Brazil.

The AGU actively promoted their scientific interests by interviews with significant political linkages in the USA and also in some other countries and doubled the number of annual press releases. They have also been actively working to educate Members of the US Congress on the importance of investing in science, with emphasis on the benefits that can be reaped from strong federal support.

In 2011 they launched the AGU Blogosphere (blogs.agu.org) which averages approximately 108,000 page views per month. They have supported members' career growth by launching an online career center (careers.agu.org) that offers a one-stop repository allowing qualified applicants to connect with potential employers more quickly. More than 900 resumes were uploaded in 2010 at a rate of approximately 150 per month.

Their report notes that AGU and IUGS have a great potential for both cooperating and complementing each other in achieving common objectives. One area is working to promote the development of the Earth sciences worldwide.

9. Association Internationale Pur L'Etude des Argiles (AIPEA) – Rapporteur: William Cavazza Report was received after the EC Meeting

The AIPEA is an umbrella organisation for the world's national clay societies which have 24 affiliated societies / groups from around the world: Algerian Clay Group, Australian Clay Minerals Society, Belgian Clay Group, (British & Irish) Clay Minerals Group, Clay Science Society of Japan, Croatian Clay Group, Czech National Clay Group, Dutch Clay Group, French Clay Group, German-Austrian-Swiss Clay Group, Greek Committee of Clay Science and Technology, Hungarian Clay Group, Israel Society of Clay Research, Italian Association for the Study of Clays, Nordic Society for Clay Research, (North American) Clay Minerals Society, Polish Clay Group, Portuguese Clay Group, Romanian Group for the Study of Clays and Clay Minerals, Russian Clay Group, Slovak Clay Group, Spanish Clay Society, Turkish National Committee of Clay Sciences and Ukrainian Clay Group.

The organization is financially independent and receives income from subscriptions to the International Clay Conferences, from individual members and affiliated societies.

AIPEA organizes an International Clay Conference every four years. Its major issues are directed to attracting new clay societies to become affiliated to AIPEA and to give support to national clay societies in the organization of local events. Its major accomplishments include continuing to develop and further improve its website as a source of information and support for the worldwide clay community (www.aipea.org). AIPEA also produces an annual Newsletter which circulated among its members via e-mail and also made accessible via the AIPEA Website. An AIPEA Ordinary Meeting took place in Antalya (Turkey) during EUROCLAY 2011 and awarded prizes to four distinguished students for their excellence in the presenting their research.

AIPEA will hold its next International Clay Conference (15th Edition) in Rio de Janeiro (Brazil, during July 7th to 11th 2013. Its announcement is at www.aipea.org. AIPEA would like to advertise the publication of

the 1st. monographs of AIPEA Educational Series entitled *Interstratified Clay Minerals: Origin, Characterization and Geochemical Significance* - edited by Saverio Fiore, Javier Cuadros and F. Javier Huertas.

10. Balkan Geophysical Society (BGS) - Rapporteur: S.K. Tandon No report received

11. Canadian Federation of Earth Sciences (CFES) – Rapporteur Peter Bobrowsky

CFES is an Interdependent organization and

The Board Members meet 12 times annually two of those twelve are formal meetings and the others are via teleconference.

The major issues for the current leadership committee include:

- Creating a stable Long term financial and organizational basis for CFES
- Canadian bid for IGC 2020
- Geoparks – future nominations
- Continue to update and make available the CanGeoRef reference database (a joint venture with the American Geoscience Institute (AGI))
- Outreach through the Canadian Geoscience Education Network (CGEN), and legacy projects of CNC-IYPE
- Human Resources, specifically helping the Canadian chapter of the Youth Earth Science Network off the ground
- Mentorship medal (www.geoscience.ca/awards)

Major Accomplishments of the organization (or geological communities) include:

- Legacy projects of the CNC-IYPE: Where Challenge, Careers website, Four Billion Years and Counting book, Geovistas project (www.earthsciencescanada.com)
- National Earth Science Newsletter (4 times per year: www.geoscience.ca/news)
- Canada's first Global Geopark: Stonehammer, Saint John area, New Brunswick
- CanGeoRef – launched September 15, 2011, www.cangeoref.org
- Ongoing efforts on human resources challenges, partly in cooperation with Geoscientists Canada and Canadian Human Resources Councils
- Charter member of the new Science Media Centre of Canada, which focuses on bridging the communication gap between media and scientists. www.sciencemediacentre.ca
- Make competitive insurance package available to all Canadian geoscientists and geosciences member organizations.
- Canada is represented at ICSU by President-elect Gordon McBean

Major Activities of the Organization:

- The Geoscience of Climate Change, Fall 2008, Banff, AB (together with GAC and CSPG)
- The Future of Earth Sciences in Canada, special session at GeoCanada 2010, Calgary, 2010
- Careers session with earth science students of the University of Regina, SK, Fall 2009
- Initiated activities to explore closer cooperation between CFES, AGI, GSA and the Geological Society (UK)

CFES is a Federation of 12 member organizations and 2 cooperative groups, representing about 20,000 Canadian earth scientists. It goes too far here to report on the activities of the constituency. Check their individual websites – see <http://geoscience.ca/index.php?page=member-associations>

An activity to include in *Episodes*: Stonehammer Geopark, Canada's first Global Geopark

12. Carpathian Balkan Geological Association (CBGA) - Rapporteur: S.K. Tandon

The CBGA council meeting was held on Sept 15th 2011, in Belgrade. Scientific activities consist of the working groups which are organised based on different research fields such as Petrology, Tectonics, Hydrogeology etc.

From the 14th to 16th September, 2011, the 17th meeting of AEGS was organised in Belgrade, Serbia. Preparation of the website is under way for the forthcoming CBGA2011 Congress to be held in Tirana, Albania.

13. Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)
Rapporteur: Zhang Hongren No report received.

14. Commission for the Geological Map of the World (CGMW) - Rapporteur: Jacques Charvet

CGMW is a non-governmental organization, under the French Law of 1901 for non-profit associations, affiliated to IUGS since its creation. The present statutes were adopted in Paris at the 26th CGI in 1980.

The CGMW attended 5 international meetings in 2011:

- 23rd Colloquium of African Geology, Johannesburg (South Africa), January 8th -14th 2011
- European Geoscience Union, Wien (Austria), April 2011
- 14th Latin American Congress, Medellin (Colombia), 29th August- 2nd September 2011
- OneGeology steering committee, Tokyo (Japan), 25th -29th September 2011.
- American Geophysical Union Fall Meeting, San Francisco (USA), December 2011.

The major issues of the current leadership committee concern: i) the moving towards digital mapping and implementing an effective and secure online distribution of CGMW production; ii) the finding of private sponsors to counterbalance the drastic decrease of UNESCO funding. Efforts are also devoted to sustaining the outreach activities in universities and highschoools.

The major accomplishments in 2011 were:

- publication of the Seismic Atlas of the Messinian Salinity Crisis markers in the Mediterranean and Black Seas;
- several major mapping programs in completion to be presented at the 34th IGC: Structural Map of the Atlantic, Structural Map of the Pacific, International Geological Map of Asia, Magnetic World Maps, Geology of the World's oceans, Structural Map of the Alps.

CGMW convened two international meetings:

April 2011. Workshop on the Tectonic Map of the Arctic (TeMAR). 24 participants from 8 countries: Russia, USA, Canada, Sweden, Norway, Denmark, Germany and France. April 2011 in Beijing (China). Workshop on the International Geological Map of Asia (IGMA 5000) and a scientific symposium on the Geology of Asia, attended by 80 scientists from 14 countries, hosted by the Institute of Geology of the Chinese Academy of Geological Sciences.

The CGMW has a partnership with the French Geological Society to publish scientific syntheses and an informal agreement with IUGG to publish international Geophysical maps such as the World gravimetric maps (3 maps, 2012), the European map of magnetic declination (2012).

The production of the Commission, especially maps, is regularly presented in *Episodes*. The CGMW General Assembly is held every two years, either at UNESCO in Paris or at the IGC. The average number of people attending these meetings is 80-100.

In a separate letter, the President Ph. Rossi thanks for the grant of 6,000 US\$ given in 2011, recalls that in previous occasions IUGS has provided extra funding to contribute to the participation in the IGC, and asks if IUGS could renew such a support, since the Australian venue of the congress makes travel and shipping costs higher.

15. International Center for Training and Exchanges in the Geosciences (CIFEG) – Rapporteur – Jacques Charvet Report received after the meeting.

CIFEG is a foundation working to develop exchanges in the Geosciences between southern and northern countries through the support of information, education, capacity building and research activities. Its main goal can be briefly described as a geoscientific knowledge sharing.

CIFEG is a French non-profitable Foundation working with the support of the French geological survey – BRGM (main contributor since 1981), UNESCO, IUGS, and the French ministries of Foreign and

European Affairs, Higher Education and Research.

Its staff of three permanent persons during 2011 operates through a network of more than eighty multi-disciplinary scientists. In 2012 it is expected to reduce drastically the permanent staff and to work progressively only with volunteers.

It held 3 meetings of executive board and Board of administrators and 2 meetings of « Cifeg future committee».

It is involved in several important projects:

- UNESCO Initiative for earth sciences education in AFRICA; five scoping regional workshops were organized
- AEGOS (African-European Geo-Resource Observation System)
- MAWARI Program (Sustainable Management of groundwater Resources in the Rift System),
- PANGEA Publication
- GUINEA Assistance

The CIFEG budget for 2011 was: BRGM grants: 80 000€; AFD (Guinea) budget: 215 290€.

The work plan for the next years includes:

- Conception and managing of an African Geosciences internet portal (with main concern towards universities Earth Sciences departments and Geosciences higher education institutes)
- Participation to the 40th Anniversary of the *International Geoscience Program* (IGCP) at UNESCO Headquarters in *Paris*.
- Participation to the technical support of UNESCO Earth sciences education initiative in Africa.
- Final Publication of two thematic PANGEA issues (CORUS and MAWARI programs)
- Continuation of the assistance to the ministry of Geology and Mines of Guinea.

The chief problems for 2012 are: the gradual moving towards volunteer's organization and a recurrent problem of funding for actions development and a general difficulty of access to private sponsoring due to this actual global economical crisis.

Due to the uncertainty for the operating budget in relation with gradual reduction of the BRGM funding and the gradual moving towards volunteers organization, the IUGS support appears to be fundamental in 2012 for the CIFEG future.

16. Circum-Pacific Council for Energy and Mineral Resources (CPCRM) - Rapporteur: Zhang Hongren

The Circum-Pacific Council for Energy and Mineral Resources (CPC) has been established and for decades supported by famous American petroleum geologist Michel T. Halbouty. Founded in 1972, CPC is a non-profit international organization of Earth Scientists and Engineers. The Council develops and promotes research and cooperation among industry, government and academia for the sustainable utilization of earth resources in the Pacific Region.

The Council's goals include: improving knowledge of earth resources and damaging geologic hazards in the Pacific Region; increasing collaboration among geologists, hydrologists, biologists, oceanographers and related scientists; and disseminating earth-science information through maps, publications, symposia and workshops.

The Circum-Pacific Council had a very active year in 2011. Two major Director's meetings were held. One in May at the Geological Survey of Finland in Helsinki, in conjunction with the 2011 GeoHab Conference and one in October in Nadi, Fiji in conjunction with the SPC/SOPAC Divisional meeting and STAR science sessions. Following each of these Director's meetings a CPC workshop on marine renewable energy development was held. CPC's involvement with the GeoHab geological and biological mapping group has enlarged its geographical scope.

The Council continued to facilitate the publication of scientific results, such as the support provided for a Special Issue of Continental Shelf Research on "Geological and Biological Mapping and Characterization

of Benthic Marine Habitats” (2011). Insights has published a book entitled “Seafloor Geomorphology as Benthic Habitat, GeoHab Atlas of Seafloor Geomorphic Features and Benthic Habitats”.

The coming events in 2012 are:

A director’s meeting to take place on Orcas Island, Washington State, USA April 29 followed the next day by a CPC sponsored workshop entitled “Geoscience Characterization of the Seabed for Environmental Assessment of Marine Renewable Energy Activities”. A CPC Director’s meeting will also be held in Noumea, New Caledonia November 3 followed by a workshop on “Marine Benthic Habitat Mapping for Fisheries”. In addition, plans are being formulated for a CPC sponsored coastal and marine mapping workshop to be held later this year or early 2013 in Chile that will address geological and biological mapping techniques beneficial for Latin America.

No financial requirement from IUGS.

17. Drilling, Observation and Sampling of the Earth’s Continental Crust (DOSECC) -No report received

18. European Association of Science Editors (EASE) – Alberto Riccardi

The aims of EASE are in promoting improved communication in science. EASE is a not-for-profit organization, registered in England and Wales.

EASE is affiliated to both IUGS and the International Union of Biological Sciences and is an international non-governmental organization in relationship with UNESCO and the International Organization for Standardization. EASE also co-operates with editors’ associations around the World, and is represented at meetings of ISO and BSI.

In June 2011 the EASE triennial conference was held. Training Workshop for Editors was held in Warsaw, Poland in January 2011 and a Peer review workshop was held in Barcelona, Spain in June 2011.

The major issue of the current leadership is the recruitment and retention of members. Major accomplishment of the organizations is the publication of Author Guidelines which has been translated into 15 languages.

Current leadership is listed. The report, prepared by EASE President, is brief and no money is requested.

19. European Federation of Geologists (EFG) - Rapporteur: Jacques Charvet

News from the EFG Board

1.1. Nomination of Officers at the EFG Council in Budapest 2011

1.2. Composition of the Board for 2011/2012

2. EFG Events

2.1. Geotrained Final Conference, Brussels, 27 January 2011

2.2. Workshop “Geology at different education levels in Europe”, Budapest, 19 May 2011.

2.3. GEOTRAINET+ meeting, Brussels, 14 October 2011.

3. Project activities

3.1. Geotrained project

3.2. EuroAges project

3.3. Terrafirma project

3.4. Pangeo project

4. Panels of experts

5. Participation in European Consultations

5.1. EC Discussion paper “Raw materials for a modern society”

5.2. Public consultation on possible Innovation Partnership on Raw materials

5.3. Public consultation, DG Internal Market, « Recognition of Professional Qualifications

Directive »

- 5.4. Green Paper, "Modernising the Professional Qualifications Directive"
6. EFG Communication
 - 6.1. Electronic version of the European Geologist Magazine
 - 6.2. GeoNews
 - 6.3. EFG Facebook account
 - 6.4. Web statistics
7. Statistics
 - 7.1. EFG Statistics of EurGeol title 2011
 - 7.2. National associations membership
8. Medal of Merit
9. Financial report 2011

EFG Annual Report 2011

Introduction

This report summarises the main activities of EFG for 2011. The structure of this report follows the publication EFG Annual Report 2010. A new publication with the annual report 2011 will be presented in February 2012. This report summarises part of the content of the future publication.

1. NEWS FROM THE EFG BOARD

1.1. Nomination of Officers at the EFG Council in Budapest 2011

New EU-Delegate: Since 21 June EFG has a new EU-Delegate, Eva Hartai from Hungary. Eva Hartai is an Associate Professor at the Institute of Mineralogy and Geology of the University of Miskolc. She is also the president of the Educational Section of the Hungarian Geological Society and a representative of the Society in the Hungarian Academy of Sciences.

2. EFG EVENTS

2.1. GEOTRAINET Final Conference, Brussels, 27 January 2011.

Venue: Royal Academy of Sciences, Brussels.

This conference not only closed one week full of activities dedicated to the GEOTRAINET project, having started with the organization of the last of eight training courses for drillers and designers of Ground Source Heat Pumps (GSHP) at the beginning of the week, but was also the last highlight of

20. European Geoparks Network (EGN) - Rapporteur: Jacques Charvet

The EGN did not send a real report on its activities, but a copy of the "Terms of Reference for collaboration between the IUGS and the Global Geoparks Network on the geological assessment process of new Geoparks nomination applications" which has been already discussed by the EC.

However, as a representative of IUGS on the EGN committees, I can say that two meetings of the Advisory and Coordination Committees were held as usually:

- one in Brecon, Wales, UK, on March 28-31
- one in Larvik, Norway, on September 13-15, followed by the 10th European Geoparks Conference in Langesund, on September 16-20.

7 new Geoparks were accepted for Europe in 2011:

- Muskau Arch Geopark - Germany/Poland
- Sierra Norte de Sevilla Natural Park, Andalucia - Spain
- Burren and Cliffs of Moher- Republic of Ireland
- Katla – Iceland
- Bauges – France
- Apuan Alps - Italy
- Villuercas-Ibores-Jara – Spain

21. European Mineralogical Union (EMU) - Rapporteur: William Cavazza

The objective of EMU is to further European cooperation in the mineralogical sciences (mineralogy, petrology, geochemistry). The activities include the organization of meetings and schools, and book publishing. EMU has traditionally been involved both in the basic and the applied part of mineral sciences. EMU has built strong bridges to all other fields of geo- and material sciences where solid matter is present as a component of the geo-system studied. EMU keeps similarly strong connections with related fields in environmental, analytical and material sciences, physics and chemistry

In 2011, an EMU school on '*Bulk and surface structures of layer silicates and oxides: theoretical aspects and applications*' was organized by Maria Franca Brigatti and Annibale Mottana, (July 10 to 20, 2011, Rome, Italy). An EMU School on '*Electron microscopy and nanoscale phenomena in minerals*' is planned for 2013 in Granada, Spain. EMU helped 56 institutional libraries facing serious financial difficulties (mainly in Eastern Europe and Latin America) by donating them free subscription of European Journal of Mineralogy. Two further volumes of the EMU Notes in Mineralogy were printed in 2011: '*Industrial Mineralogy*' (G. Christidis, ed.) and '*Layered mineral structures and their application in advanced technologies*' (M.F. Brigatti & A. Mottana, eds.). EMU continues publication of the high-impact journal *European Journal of Mineralogy*.

Although affiliation to IUGS is mentioned, there is no IUGS logo in the EMU homepage. No request for IUGS funding.

22. Geochemical Society (GS) - Rapporteur: Ochir Gerel - No report received.

23. Geological Society of America (GSA) - Rapporteur: Colin Simpson

Review of the GSA Report plus the GSA Summary Report prepared by Wesley Hill and Colin Simpson

Geological Society of America (GSA) members comprise a diverse community which totals over 24,000 members globally within the categories: Professionals, Students, Recent graduates, & K-12 teachers. GSA has affiliates in 99 countries, 7 regional Sections within the U.S. with 40+ scientific specialties and interests who belong to one or more of 17 special interest Divisions from education, industry, and government. GSA student members represent 30% of GSA's total membership. GSA has a priority to be active in the international science community and in FY2011 it served approximately 3,000 members residing outside of the United States. Nearly 600 GSA professional members in 39 countries serve as University Campus Representatives to encourage their students to pursue careers in the geosciences, and to take advantage of programs and services offered through GSA membership.

The GSA organized 10 meetings in 2011 included the Penrose Conferences, Field Forums, Specialty Meetings, Section Meetings. Their Annual Meeting & Exposition in Minneapolis attracted over 6,300 attendees from across the globe. Regional Section Meetings in the USA had a combined attendance of approximately 3,200, and four Penrose Conferences were held (Colombia, Spain, and 2 in the USA). GSA also sponsored a Specialty Meeting in Ankara, Turkey which attracted over 400 people from 37 countries.

GSA published 18 peer-reviewed scholarly books in fiscal year 2011 including 12 volumes in The Special Paper series, 2 volumes in The Memoir series, and 4 Field Guide volumes.

In 2012 the GSA will engage in a Strategic Plan update focusing on where the geoscience profession is going and what role GSA will play in that future.

24. Geological Society of Africa (GSAf)- Rapporteur: Ezzoura Errami

The GSAf is involved in Earth Science Education initiatives in Africa (UNESCO, GSA, AGI, AAWG). They submitted also a proposal of establishment of Regional Excellence Centers in Earth Sciences in Africa. They are working as steering committee member in AEGOS and GIRAF projects. The GSAf is becoming a member of the technical committee in developing framework on management of mineral resources in

the ACP countries.

They organized their 23rd Colloquium of African Geology and participated to the 50th IUGS anniversary (Paris, France). They participated also to the AEGOS meeting and conference (Dakar, Senegal), to the mineral resources workshop and technical meeting (Brussel, Belgium), RIO+20 meeting (Pretoria, South Africa), to the mineral resources conference on Western and Central Africa regions and to the First International Conference on African and Arabian Geoparks, FICAAC (El Jadida, Morocco). They supported morally the FICAAC.

They are preparing their 24th colloquium and the 40th anniversary of the society. The GSAf website is linked to the IUGS and the IUGS-CoGE

They provided a financial report and they are asking for the same IUGS allocation or a bit more.

25. Geological Society of India - Rapporteur: Alberto Riccardi

Report was combined with the Adhering Report for India – please refer to that report.

26. Geologische Vereinigung (GV) - Rapporteur: Ezzoura Errami

The GV has more than 1600 members in over 60 countries. It is organizing one meeting per year. The IUGS logo is highlighted on their website under associated societies with the GSA. They have joint activities with other Earth Science Organizations in Germany. The major accomplishments of the organization are International annual meetings, publishing the “International Journal of Earth Sciences” the formerly named “Geologische Rundschau”, publishing the book series “Frontiers in Earth Sciences”, and sponsoring short courses.

The GV annual meeting “Fragile Earth – Geological Processes from Global to Local Scales, Associated Hazards & Resources” took place in Munich as a joint meeting together with the Deutsche Gesellschaft für Geowissenschaften and the Geological Society of America. Special support is provided for students to attend meetings and short courses. The GV section “Sedimentology” and the optional combined membership with the Deutsche Mineralogische Gesellschaft have been established successfully. The society is communicating with its members by Geowissenschaftliche Mitteilungen, a quarterly journal jointly edited with the other Earth-Science societies of Germany.

27. International Association of Engineering Geology and the Environment (IAEG) - Rapporteur: Peter Bobrowsky – Received after the EC Meeting.

The IAEG was founded in 1964. It is a worldwide scientific society with more than 3,400 members, 55 national groups and 17 active commissions.

The main objectives of the IAEG are:

- To promote and encourage the advancement of Engineering Geology through technological activities and research;
- To improve teaching and training in Engineering geology, and
- To collect, evaluate and disseminate the results of engineering geological activities on a worldwide basis.

The major activities of the IAEG are:

- Edits a quarterly journal, the Bulletin of Engineering Geology and the Environment published by Springer Verlag, containing original scientific papers in English or in French, book reviews, meeting reports and a geodiary.
- Operates commissions led by eminent world specialists, who review the current state of the art on various topics promoting international cooperation among geologists and engineers who have an interest in engineering geology and related environmental issues.
- Supports international meetings – an IAEG Congress is held every four years in an inviting

country selected from bidding countries at the time of the preceding Congress. IAEG activities are also organized on the occasion of the International Geological Congress. In addition, the IAEG sponsors various international symposia and regional conferences organized by national committees on specific topics.

- Publishes a newsletter, circulated by e-mail twice a year to all members of the IAEG.
- Awards every two years a medal and a prize to outstanding engineering geologists every two years.

IAEG is currently (2010-2014) led by the Executive Committee headed by the president, Carlos Delgado from Spain, and the immediate past president, Fred Baynes from Australia. And the Secretariat is located in Beijing, China since 2010. IAEG has its website at <http://www.iaeg.info>.

Membership

31 National Groups among total 55 have registered 3302 individual members and 11 associate members for the year 2012. The total number of members in the same 31 NGs has an 11% increase compared with the last year, but there is a 95 difference to the total number 3397 from 37 NGs last year. However, we are optimistic that the number will likely to exceed last year after the information is update by the rest 24 NGs.

Academic Activities Include:

The 11th IAEG Congress (IAEG 2010) was hold in Auckland New Zealand, 5-10 September 2010 on the topic "Geologically Active." Totally 706 people from 46 countries participated in the congress, 569 papers published by Press or Taylor & Francis as the proceedings of the congress.

The Young Professionals' day was supported by 51 young professionals, with highlights including a mentoring breakfast, the contesting of the Richard Wolters Prize and an afternoon out on the Waitemata Harbour in America's Cup yachts. A new Young Professionals' Commission (C30) was established as a result, with representatives from 11 countries.

Other key events included meetings of the Executive and Council of the IAEG, the Hans Cloos lecture awarded to Dr Martin Culshaw, keynote presentations, congress sessions, commission meetings, poster presentations, the Great Debate and the Great Kiwi BBQ.

Important Events

- New Executive Committee

The new Executive Committee of IAEG for 2011 to 2014 has been created by voting at the Council meeting and held its first meeting on September 7, 2010 during the 11th IAEG conference at Auckland New Zealand.

- The Technical Overseeing Committee for Commission development

The Council approved the creation of a Technical Overseeing Committee in Moscow on September 5th 2011, for the collaboration with commissions, giving them all assistance possible and receiving information on the state of work in each commission.

- Handover of IAEG Secretariat from Paris to Beijing
- Hans Cloos Medal and Richard Wolters Prize 2010

The "Hans Cloos Medal" is the senior award presented by IAEG, given to an engineering geologist of outstanding merit in commemoration of Hans Cloos, the "founder of geomechanics".

The Executive Committee of the IAEG has decided during its meeting in Chengdu to award the 2010 Hans Cloos Medal to Prof. Martin Culshaw from the UK. The Medal has been awarded to Martin Culshaw in Auckland in 2010, during the 11th IAEG International Congress.

The Hans Cloos Medal 2012 has been decided by the Executive Committee to award to Professor Victor Ivanovich OSIPOV from Russia.

The Richard Wolters' Prize specifically recognizes meritorious scientific achievement by a younger member of the engineering geology profession and is awarded to honour Dr. Wolters' many contributions to international understanding and co-operation.

The Richard Wolters Prize 2010 has been awarded to Dr. Darren Paul from Australia and audience award going to Helen Reeves from the UK.

Anticipated Activities

1. The 34th IGC

IAEG will organize engineering geologists all around the world to attend the 34th International Geological Congress in Brisbane, Australia, 5-10 August, 2012 and arrange a series of activities related to engineering geology.

2. ISL/NASL 2012

IAEG will organize to attend the Joint International & North American Symposium on Landslides, ISL/NASL 2012 in Banff, Canada on 4 June, 2012 and hold its Executive Committee meeting and Council meeting.

3. IS-Shanghai 2012

IAEG will hold an International Symposium on Coastal Engineering Geology (IS-Shanghai 2012) in Shanghai, China September 20–21, 2012.

4. The 12th IAEG Congress

The 12th IAEG Congress and the commemorating ceremony of the 50th anniversary of IAEG will be held in Torino, Italy in 2014.

28. International Association of Geomorphologists (IAG) - Rapporteur: Peter Bobrowsky

An extremely active group affiliated to both IUGS and IGU. Founded in 1985 and now has 42 national members. They host an international congress every four years (Australia in 2009 and France in 2013), but host annual regional meetings all over the world. Executive meets annually. Most of IAG's income comes from membership dues and very successful publications. IAG consists of several working groups including a new one on geoh heritage (specifically Danxia in China). IAG has been supportive of the GeoParks movement.

The IAG should be thanked for their support towards a number of common interests shared with the IUGS.

Requests: None

29. International Association of GeoChemistry (IAGC) - Rapporteur: Ochir Gerel – No report received.

30. International Association on the Genesis of Ore Deposits (IAGOD) - Rapporteur: Ochir Gerel

No report received

31. International Association of Hydrogeologists (IAH) - Rapporteur: Ezzoura Errami

Meetings throughout the year: Main conference in Pretoria, South Africa in September 2011, held jointly with the Groundwater Division of the Geological Society of South Africa. The Executive of the Association met three times – in February, June and September, and the Council of the Association met in Pretoria in September. IAH supported or endorsed a number of other international meetings, and national chapters of IAH also held many technical meetings, conferences and field visits.

Major issues for Committee: Maintaining membership levels in times of economic recession; adapting to the changing face of scientific publication – paper journals versus online access; attracting younger professionals into the Association and providing benefits that they would like and will encourage them to join and stay; keeping the cost of conferences affordable but at the same time maintaining the scientific content at a high level.

Major accomplishments: In 2010 the Association undertook a comprehensive Forward Look review of all its activities and is now implementing activities arising from this. After agreement of the IAH Council, IAH has internally reviewed its existing structure of scientific commissions and established a renewed set of commissions and networks from mid 2011. One of these is an Early Career Hydrogeologists Network to support younger professionals and to encourage them to participate more in IAH activities. We intend to develop this initiative further.

As mentioned above, the major international conference of 2011 for IAH was held in Pretoria, South Africa, with the theme: “Groundwater: our source of security in an uncertain future”. The conference was held jointly with the Groundwater Division of the Geological Society of South Africa. The 320 participants were dominantly from within South Africa, but there were IAH colleagues from a number of countries in Europe, elsewhere in Africa and Asia. International IAH meetings were also held during the year in Morocco, Greece and Spain, and senior IAH members also participated in international events in South Africa for World Water Day in March, Stockholm Water Week, Drinking water conference in Moscow, GSA in Minneapolis and AGU in San Francisco. Many of IAH’s national chapters hold regular scientific meetings throughout the year, sometimes in collaboration with national geological and groundwater associations. These certainly include France, Spain, UK, Ireland, Colombia, Netherlands, Canada, Australia, Denmark, Slovenia, Croatia, USA.

We used the experience of some IAH members who worked in Sri Lanka after the tsunami there several years ago to provide technical advice and support to colleagues in Japan who have been investigating the impact of the 2011 tsunami on groundwater quality in the affected northern coastal region of the country.

Many of the IAH national groups collaborate with other geology-related societies in their own countries. However, national links between IAH and other groups are not registered centrally.

IAH has already reported on its hydrogeological mapping expertise in *Episodes*. We would be interested to use the information channels of IUGS occasionally for disseminating groundwater related information. Our web site already refers to IUGS.

IAH having a stake in both geological sciences and water sciences would like to see closer cooperation between IUGS and IUGG.

32. International Association for Mathematical Geosciences (IAMG) - Rapporteur: Colin Simpson

The IAMG is an independent organization, with links and affiliations with other organizations such as the International Statistical Institute (ISI), American Association for Petroleum Geologists (AAPG). During

2011 they increased their membership to over 600.

The IAMG continues to be an active organisation with a strong focus on publications. During 2011 they continued to publish their three international scientific journals: *Computers & Geosciences* with Elsevier as publisher, and *Mathematical Geosciences*, and *Natural Resources Research*, with Springer. They continue to offer their monograph series (currently nine titles) with Oxford University Press; and have five titles in their series of Studies for Students. They issue a semi-annual Newsletter.

In 2011 they sponsored several conferences and courses in the USA, Spain, China and in the 50th Mining Příbram Symposium (Czech Republic). They supported 7 YES Student Chapters, and funded travel to conferences for two students, and will provide research grants to 5 graduate students for 2011-2012.

They participated in activities of the International Year of Planet Earth of which they were a scientific partner and they are currently a Scientific International Partner of the Earth Science Matters Foundation.

Their aims for the future include:

- to encourage the formation of new student chapters, and increase the activity of existing ones.
- to identify and reward scholars in the mathematical geosciences through one of their several prizes and Distinguished Lecturer programs.
- to continue sponsoring events related to mathematical geosciences such as courses and conferences.
- to continue to improve the quality and reach of their publications and newsletter.

33. International Association of Sedimentology (IAS) - Rapporteur: William Cavazza No Report received.

34. International Consortium on Landslides (ICL) - Rapporteur: Peter Bobrowsky

This organization started in 2002 as a follow up to an IGCP project. IUGS was a founding supporting organization with about 10 other nations. Their membership is now boasting at approximately 51 members. The ICL has very strong support from UN based bodies such as ICSU, FAO and UNESCO. They have an annual budget of about \$130,000 USD (comes from dues and Japanese government) and they publish extensively (color journal through Springer plus numerous books per year). They organize a congress every three years (Italy in 2011 and China in 2014). They have a multi-matopma; executive and they promote education in developing countries (e.g. training schools in Kyrgyzstan and China). They plan to actively promote themselves through Episodes, They actively promote the IUGS in all activities.

ICL should be congratulated on providing an important capacity building service to developing countries and for their continued promotion of the IUGS.

Request: \$10,000 USD

35. International Federation of Palynological Sciences (IFPS) - Rapporteur: S.K. Tandon

Numerous meetings of 23 member societies took place in the year under report. Major focus was on the organisation of the 2012 four yearly International Palynological Congress 13 to be held in Tokyo in August, 2012. Plans are progressing well for the 13th International Federation of Palynological Congress (IPC13) being held jointly with the International Organisation of Paleobotany Conference (IOPCG) in Tokyo (Japan) from 23-30 August, 2012. The newsletter "PALYNOS" was regularly published, the website remained active, and the "World Directory of Palynologists" is continually updated electronically.

36. International Geoscience Education Organization (IGEO)

Rapporteur: Wesley Hill No Report received.

37. International Mineralogical Association (IMA) - Rapporteur: William Cavazza

A rather short and perfunctory report. Major issues of the current IMA officers are to further the international cooperation in the mineralogical sciences. To this end the activities of the Association include:

- (a) The promotion of intercourse among mineralogists of all nations by organizing meetings and field excursions and by sponsoring publications of mineralogical interest.
- (b) The maintenance of Commissions and Working Groups to examine and report on certain aspects of mineralogical practice, and to encourage international collaboration between mineralogists in specific fields.
- (c) The participation in action with other international groups having mineralogical interests, and the establishment of committees to expedite other matters.

A total of 11 commissions and 8 subcommissions are active within IMA at present. The IUGS logo is present the IMA homepage. There was no request for IUGS funding.

38. International Medical Geology Association (IMGA) - Rapporteur: Zhang Hongren

Last year IMGA has formalized the Association by developing and adopting a Constitution and By-laws. Several new Chapters have been developed in many parts of the world. Membership, Dues, and Finances

As of December 2010, IMGA had about 300 paying members and 100 members who are in the process of paying. IMGA membership is spread all over the world, representing more than 55 countries.

Chief accomplishments

Newsletter

In 2010, two newsletters and 3 e-newsletters by e-mail were published. From newsletter 2-2010 the newsletters will only be distributed as pdf files to all members.

Website

The website is updated at least every second week and expanded.

Regional Divisions

IMGA has at present following active Divisions : South America, Central America , Russia and NIS

Short courses

The following courses have been held this past year: Ireland , Turkey and Portugal. Courses are planned in e.g. China and Italy in 2011.

Conferences

Several national and international meetings have been attended during 2010, including:

- The First International Symposium in Iran on Medical Geology, Medical geology at SEGH 2010 in Ireland,
- The XIII Congress of Toxicology and Chemical Security, Bogotá, Colombia in March 2010,
- GEOCANADA 2010 Conference: Medical Geology Poster Display Calgary, Canada, May 2010

Education activities

- A one-credit Medical Geology class held at the University of Texas at Dallas (65 students).
- Karolinska Institute in Sweden is now preparing for regular courses in medical geology for medical students.
- A web based course in medical geology is in preparation and will be tested in 2011. Special Journal Publications on Medical Geology.

IIMGA has been deeply involved in Encyclopedia of Environmental Health, EEA, to be published by

Elsevier. This will be published 2010. In addition, IMGA has published papers on medical geology in a large variety of journals during 2010. No financial requirement

39. International Federation of Paleontological Association (IFPA) - Rapporteur: S.K. Tandon

Numerous meetings of 23 member societies took place in the year under report. Major focus was on the organisation of the 2012 four yearly International Palynological Congress 13 to be held in Tokyo in August, 2012. Plans are progressing well for the 13th International Federation of Palynological Congress (IPC13) being held jointly with the International Organisation of Paleobotany Conference (IOPCG) in Tokyo (Japan) from 23-30 August, 2012. The newsletter "PALYNOS" was regularly published, the website remained active, and the "World Directory of Palynologists" is continually updated electronically.

40. International Permafrost Association (IPA-Frost) - Rapporteur: Zhang Hongren

In 2011, the International Permafrost Association has been pursuing a wide range of initiatives outlined in the strategic plan presented to the IPA Council in June 2010.

Individual memberships have been growing steadily and more than 400 people were registered with the IPA as of December 2011. These totals are expected to rise with registration for the Tenth International Conference on Permafrost, which will offer a reduced registration fee for IPA individual members.

The IPA has also launched the first application process for Action Groups. These will take advantage of the financial resources set aside by the IPA to support international research projects. The first application round closed in October 2011 and the successful action groups will be announced at the beginning of 2012.

The IPA launched a survey of national committees at the start of 2011. The goal of this survey was to gain a comprehensive overview of the institutional ties that the committees have been maintaining with national and international institutions, and to assess the level of interest and financial support available in each member country. The results of this survey will soon be released to the IPA Council Members and will serve as a platform for developing new tools to strengthen the national committees.

The IPA has also worked on improving its web presence, and to create a modern publishing platform for its country reports. These reports are now published online in a searchable and exportable format that is referenced with an ISSN number and fully citeable (<http://ipa.arcticportal.org/publications/country-reports.html>). Archived reports will progressively be input into the database, but members can already access reports dating back to 1989.

The IPA has welcomed two new members in 2010 and 2011. Kyrgyzstan and South Korea became the 25th and 26th members of the IPA. Kyrgyzstan has a long tradition in permafrost research, which relates to the fact that permafrost occurs within approximately 30% of the country's territory and is contiguous with permafrost in Kazakhstan, China and Tajikistan. South Korea has been active in permafrost research for the past 20 years, and the inception of the Korea Polar Institute has given a boost to its community of permafrost scientists who are active in both the Arctic and the Antarctic. The IPA Council members welcomed Kyrgyzstan and South Korea, who will first sit at the IPA Council during the Tenth International Conference on Permafrost in June 2012.

Several members of the IPA were involved in writing the Climate Change and the Cryosphere: Snow, Water, Ice and Permafrost in the Arctic (SWIPA). The project aimed to synthesize the recent changes to the cryosphere, and examine their impacts and implications for northerners and the ecosystem. SWIPA was approved by the Arctic Council in April 2008 as a follow-up to the 2005 Arctic Climate Impact Assessment (ACIA). The project is coordinated by the Arctic Monitoring and Assessment Programme (AMAP) in cooperation with IASC, the World Climate Research Programme/Climate and Cryosphere Project (WCRP/CliC), the International Polar Year International Programme Office (IPY IPO) and the International Arctic Social Sciences Association (IASSA).

The IPA welcomed the release in April 2011 of the “State of the Arctic Coast 2010” report. This report, sponsored by the IPA, IASC, AMAP and the Land-Ocean Interactions in the Coastal Zone (LOICZ) project, was a collaborative effort by 47 lead and contributing authors from 10 nations including all those bordering the Arctic coast and others with Arctic interests. The report is a milestone in the study of arctic coasts and provides the first comprehensive overview of the physical and social environment of the arctic coastal zone and puts forward recommendations for future studies.

The Task Force established in June 2010 by the IPA Executive Committee to create a Strategy and Implementation Plan for the Global Terrestrial Network for Permafrost (GTN-P) is close to completing its task and will release the plan before the end of 2011. The first step in implementing the recommendations put forward in the plan is the organization of the first GTN-P workshop to define data user requirements that was held from November 10-11, 2011 in Potsdam, Germany. A document on data user requirements stemming from this workshop will be released early 2012.

The organization of the Tenth International Conference on Permafrost (TICOP) is now well under way. The conference will be held from June 25-29, 2012 in Salekhard, Yamalo-Nenets Autonomous District, Russia. The core theme of the conference – “Resources and risks of permafrost areas in the changing world” - relates to changes in the permafrost but also evokes the increasing role of mankind in transforming mountain, arctic and subarctic environments. The conference will feature scientific sessions, plenary lectures, excursions and field trips on the permafrost and a series of special events geared towards the participants. The conference will also serve as a venue for the meetings of the International Permafrost Association.

41. International Society for Rock Mechanics (ISRM) Rapporteur: Ezzoura Errami No report received.

42. International Society of Soil Mechanics & Geotechnical Engineering (ISSMGE) Rapporteur: Ezzoura Errami Report received after the EC Meeting in February.

The ISSMGE is an independent organization. There are 12 Board Members. The ISSMGE held a Council Meeting in October 2011 at the XIV Panam Conference in Toronto. Additionally the Board met four times, twice in person and twice via teleconference. The Federation of International Geo-Engineering Societies (FEDIGS), and that includes representatives from ISRM and IAEG, a meeting was held in May 2011.

Major issues of the Board:

- Increase participation of young geotechnical engineers
- Improve outreach programmes
- Improve communications with individual members

Major accomplishments of the organization:

- Establishment of the ISSMGE Foundation
- Collaboration with Geo-engineer.org
- Promotion of Technical Committee activities
- Increase number of Corporate Associates

The major activities to include international meetings workshops and activities there were 12 different international meetings that ISSMGE was involved in throughout 2011 held in cities worldwide.

The ISSMGE recent geohazard activities included earthquake, landslides and geotechnical risks. Some of the ISSMGE Board members will attend the IUGS-IGC meeting in 2012.

43. Meteoritical Society (MS) Rapporteur: Ochir Gerel -- Report received after the EC Meeting.

The Meteoritical Society (MS) is a non-profit scholarly organization founded in 1933 to promote the study

of extraterrestrial materials, including meteorites and samples returned by space missions and their history.

The MS is an International non-profit organization with approx. 1150 members in 47 countries:

Accomplishments in 2011:

The 74th Annual Meeting of the Meteoritical Society was held in London, United Kingdom, from the 8th to 12th August, 2011. The meeting took place on the campus of the University of Greenwich, on the grounds of the Old Royal Naval College. Over 520 abstracts were submitted by ~460 different authors -

- The journal *Meteoritics and Planetary Science* is doing well with 188 papers submitted in 2011. The submission rate has increased from prior years when it was ~154. All issues since 1997 are available online. We are in the process of having older issues of *Meteoritics and Planetary Science* scanned and we expect to have the entire collection online in the near future. All told, in 2011, MAPS published 116 papers, 5 citations, 3 book reviews and 2 memorials. The number of papers in 2012 is expected to be higher.
- Meteorites continue to be found in huge numbers around the world. Meteorite Bulletin 99 (MB 99) has been published. It lists 1075 meteorites, with 468 of those being non-Antarctic, as reported in Greenwich).
- In an online poll, members approved continued participation in the bimonthly *Elements*. Many Society activities are discussed there and from time to time Society members have participated in the production of special issues.

The Society initiated a voluntary online discussion group for interested members, MetSocCom, which is managed by Jon Friedrich of Fordham University.

Chief Products (e.g. Publications, Maps):

(a) The Society's own journal, *Meteoritics and Planetary Science*, was published in 12 issues and one Supplement of meeting abstracts, new meteorite data in the *Meteoritical Bulletin*, and historical papers. (b) The Society co-sponsors *Geochimica et Cosmochimica Acta* with the Geochemical Society, which is published twice monthly by Elsevier. (c) The Meteoritical Bulletin Database. (d) The Society publishes a column in the bimonthly *Elements*.

Chief Accomplishments (2004-2008):

Our journal, *Meteoritics and Planetary Science*, has been expanded and developed into a leading monthly international journal of planetary sciences. It is one of the very few planetary science journals that is published by a non-profit organization. Electronic versions of papers are now available to subscribers through the journal website.

Summary of anticipated objectives and work plan for the period (2009-2013):

- Expand Society website to increase services for members.
- Continued development of print and electronic versions of the Society's journal and *Meteoritical Bulletin*. Improving electronic access for all scientists.
- Organize successful annual meetings in Cairns, Australia (2012), Edmonton, Alberta, Canada (2013), and Casablanca (2014).
- Ensure that society responds to new challenges in planetary science from sample return missions to comets and asteroids; the assessment and mitigation of threats to Earth from Near-Earth asteroids; and the increasing discovery rate of new meteorites in Antarctica and deserts around the world.
- Work with other planetary science and related earth-science organizations for the mutual benefit of our members.

44. National Ground Water Association (NGWA) - Rapporteur: Zhang Hongren

Communications:

Ground Water and *Ground Water Monitoring & Remediation* articles were downloaded more than 122,000 times from the Wiley-Blackwell Online Library database in 2010. Articles from *Ground Water* were downloaded 99,780 times in 2010 and content from *Ground Water Monitoring & Remediation* was downloaded 23,359 times.

Government Affairs

The Association filed an amicus brief with the New Mexico state Supreme Court on a matter relating to the role of the state engineer determining groundwater extractions within the state using sound science to make an informed decision.

Although a collaborator with other associations, NGWA continues to be the lead advocate for federal funding of a national groundwater monitoring network, and organized a field briefing about it for Congressional supporter Congresswoman Betty McCollum of Minnesota.

Ground Water Science and Engineering

More attention is being given by the Association to the importance of hydrogeologic understanding of sites for proposed large-scale ground- and groundwater-source heat pump installations. Presentations were made by staff and volunteers to groups ranging from the U.S. EPA to Oak Ridge National

Laboratory

Dr. Dave Wunsch, NGWA's director of science and technology, presented high-end rock mechanics processes and monitoring related to hydraulic fracturing for oil and gas production for the American Rock Mechanics Association. He was also one of several scientific experts to attend an EPA Hydraulic Fracturing Study technical workshop. Also, the Association hosted a briefing on the potential impacts upon groundwater of hydraulic fracturing in oil and gas production for more than 100 key stakeholders.

Scientific insights related to public health and groundwater supplied by private residential well systems were shared with the Centers for Disease Control and Prevention by NGWA.

The public comment period concluded for the Association's ANSI-sanctioned water well construction standard.

Member Development

Student membership in the Association is at a recorded all-time high.

NGWA's charitable foundation awarded \$20,000 in scholarships, the most ever. Seven students were honored.

Additionally, S.S. Papadopoulos has again agreed to underwrite the Foundation's Farvolden Awards for 2012 and 2013. That will make three years of their generous support for these awards made to students with the top selected presentations or posters at the NGWA's Ground Water Summit.

Professional Collaboration

NGWA assisted a manpower study in the energy and mining sectors being conducted by the National Academies.

The Association provided input to the National Academy of Engineering with regard to a current study seeking to establish a metric of how many public groundwater supplies have been affected by man-made pollution.

NGWA is continuing its relationship with Australia's National Centre for Groundwater Research and Training, affiliated with Flinders University.

NGWA is assisted the Latin American Association for Ground Water Development (ALHSUD) as part of the organizing committee for the 12th Latin American Hydrogeological Congress in Colombia in August 2012.

Professional Development

NGWA will be able to offer academic credit through California State University-Fullerton for specific educational offerings in the future.

NGWA's member benefit of some free continuing education expanded in 2011 with Webinars from member interest groups devoted to the economics of groundwater, high volume groundwater extractions, aquifer protection, and geothermal energy.

For science and engineering firm members, the Association has introduced a series of business management workshops, as well.

The NGWA Lexicon was converted to an "app" for the iPhone and the iPad.

Public Awareness

More than 300 Web sites promoted National Ground Water Awareness Week, March 6-12, worldwide in the event's broadest exposure of its 12-year history.

Ground Water Awareness Week has been on a steady increase as measured by hits on Websites and social media platforms such as Facebook, Twitter and blogs.

44. The European Association for the Conservation of the Geological Heritage(ProGEO)

Rapporteur: Peter Bobrowsky

European based association very relevant to IUGS geoheritage portfolio. This group's focus is on geoconservation which is a compliment to geotourism; the former generally overlooked. Active members now have a full color journal with Springer and also publish four newsletters annually. They will be present with several sessions and papers at the IGC this year. They have a good website and good networks. They organize or sponsor a number of events and are very supportive of IUCN and the Geoparks Network.

ProGEO should be thanked for their support towards a number of common interests shared with the IUGS and in particular their efforts on behalf of geoparks.

REQUEST: none

45. Society for Economic Geologists (SEG) Rapporteur: Jacques Charvet – No report received.

46. Society for Sedimentary Geologists (SEPM) Rapporteur: William Cavazza

The report does not follow the IUGS guidelines. As the major international association dealing with all aspects of sedimentary geology, SEPM is a very active and diversified organization. SEPM held its Annual Meeting in Houston, TX jointly with A.A.P.G. Most of SEPM activities are in publishing and meeting organization. Both SEPM technical journals increased their Impact Factors for both journals increased again. SEPM and its journals continued to play an important role, as a founder and current board member of the geoscience online journal aggregate, GeoScienceWorld (GSW), which continues to

thrive. GSW could be taken into consideration as a potential outlet for wider and more effective distribution of *Episodes* in the future.

In 2011, a total of seven new SEPM books were published by year end. The SEPM Online Book Archive was launched late in 2010 and has been gaining both library and member subscribers. Books in the Special Publications, Concepts, Short Course Notes and Core Workshop Notes Series are uploaded to the archive either when they go out of print, are 5 years old or if they are sponsored to be free access.

SEPM continues to work with AAPG, GSA and GSL to produce jointly sponsored conferences and publications where applicable. SEPM is part of GSA-AGU-SEPM-GSL planned meeting on the coastal impacts of sea level change, being planned for 2012, probably in Houston. Besides being an IUGSSEPM remains an official member of the American Geological Institute (AGI), the North American Commission on Stratigraphic Nomenclature (NACSN), the Association of North American Paleontological Societies (ANAPS).

There does not seem to be mention of IUGS on the SEPM website. There was no request for IUGS funding.

47. Society for Geology Applied to Mineral Deposits (SGA) - Rapporteur: Colin Simpson

The objectives of the SGA are: to advance the application of scientific knowledge in the study and the development of mineral resources and their environment; to promote the profession of geology in science and industry; to cultivate personal contacts for mutually beneficial relationships; to protect and improve professional and ethical standards among its members.

The SGA is an active organisation. The Society has been growing quickly from 808 paying members in over 70 countries in 2005 to 1163 members in over 80 countries in 2011.

Apart from its members interests the SGA also maintains a focus on students via their SGA Student Network. The network links existing chapters and individuals and is open to everyone on the Facebook SGA Network. The annual SGA Student Conference (Prague) was a great success and attracted many young geoscientists who are involved in research into mineral deposits. In 2011 they also organised a Baltic Student Chapter Meeting (Poland).

Other meetings organised during 2011 included: The UNESCO-SEG-SGA Latin American Metallogeny Course (Colombia). The 11th SGA Biennial meeting (Chile); the joint Annual Meeting of the Geological Association of Canada, the Mineralogical Association of Canada, the Society of Economic Geologists and the Society for Geology Applied to Mineral Deposits (GAC-MAC-SEG-SGA) (Canada), and a session in the Goldschmidt 2011 Conference (Czech Republic).

The SGA jointly with IUGS, UNESCO, IRD and Geological Society of Africa have prepared a joint *Short Course on African Metallogeny* in Ouagadougou, Burkina Faso for March 2012. They aim for this new geo-educational activity on the African Continent to be of similar success as their Latin-American Metallogeny Courses and their report acknowledges the financial assistance from IUGS, IRD and SEG for this course.

The SGA has an active publication program. Their journal *Mineralium Deposita* recorded a 2010 Impact Factor of 2.06, the highest ever achieved by the journal. The mean impact factor for the period 2005-2010 is the highest of any journal in the field of economic geology. The *SGA News* newsletter is issued twice a year. The SGA Council has also approved in general a proposal to revive the SGA Special Publications (topical/e-books/hard copies) that used to be published with the Springer Publishing House in the past.

48. Geological Society of France (SGF) - Rapporteur: Jacques Charvet

SGF is a non-profit association whose mission is to promote Earth Sciences for addressing topics of scientific and societal importance. Those topics are realized through: international scientific meetings,

books for educational purposes, and promotion of the conservation of geological heritage. The SGF activities fit with the IUGS scientific objectives:

- making available scientific results on the entire earth system
- participating in the geological education at various levels
- organizing meetings for scientists, and also for a larger public in order to increase the awareness in geology and energy.

SGF is composed of 1000 members, 1600 subscribers for one of its publications, and is managed by a board of 24 people.

In total 17 meetings were held in 2011, including meetings of the Administration Council and board, one General Assembly and various commissions.

A major issue in 2011 was to make effective the merger of the three major French geological societies (SGF-UFG-CNFG). The three organizations have been working together for more than one year to implement the new society. To make things easier, the presidents of the CNFG and UFG were appointed as vice-presidents of the SGF for the term 2011-2012. The new statutes were finally approved by the ministry on November 4, so the merger is now official. It means that the SGF is now the Adhering Organisation to IUGS; the role of former CNFG is taken by a specific commission. The first General Assembly of the new SGF will take place on March 13, 2012.

Regarding the other activities, one may note: preparation of 15 years of articles of the BSGF to make them available online, 6 issues of the Bulletin including two thematic issues, 4 of *Géochronique*, 4 books (Vuibert and Springer), improvement of the website, participation in the GeoScienceWorld aggregate, and organization of international meetings.

The external fundings represent less than 8% of the budget.

The merger of the three French societies led to a communication posted on the IUGS website. The anticipated number of participants to IGC is more than 15.

SGF's objectives for the next five years include successful completion of additional international publication projects, increased education in Geosciences, protection of our Earth heritage, increase of the interaction between the academic and industrial communities and international outreach.

49. Italian Federation of Earth Sciences (FIST)

Rapporteur: Alberto Riccardi No report received.

50. Young Earth Scientist (YES) Network - Rapporteur: Wesley Hill

The Young Earth Scientists (YES) Network gained IUGS Affiliated Organization status in 2011. Joanne Venus is currently the YES Network President. The current leadership is due to change in early 2012. The Network will provide an updated 2012 leadership list to IUGS as soon as it is available.

Official 2011 YES meetings and events:

January: YES Africa 2011 (South Africa)

April: YES Network sessions at EGU (Austria)

October: YES Network Sessions at GSA Fall Meeting (USA)

November: YES co-convoked a roundtable at the Conference on African/Arabian Geoparks (Morocco)

December: YES Network co-convoked session at AGU Fall Meeting (USA)

Monthly Executive Meetings are held via Skype

Major accomplishments 2011:

The YES Network grew significantly in 2011 to nearly 2000 international members. There has been a significant increase in the number of National Chapters and as a result, Regional Representatives are

being appointed to assist with information transfer.

Participation in numerous international geoscience conferences including EGU, GSA and AGU meetings. Organization of the 2nd World YES Congress to be held in conjunction with the 34th IGC in Brisbane,

Australia

The YES Network is assisting the IUGS Global Workforce Taskforce in compiling a global reference on geoscience information (educational institutions, professional societies, employers). YES Network members have provided information on hundreds of geoscience institutions from around the world. The YES Network has partnered with AGI to determine key decision points in career pathways for early-career geoscientists, from university through 10 years post graduation. This study will identify the factors contributing to individual decisions and also monitor career choices over a ten-year period. The results will provide direct insight into the factors for decisions pertaining to enrolment and retention in geoscience university programs, as well as decisions about career pathway choices.

YES Geomicrobiology is an initiative of the Network to motivate early-career geoscientists to pursue research in geobiology and encourage collaboration between geologists, geochemists microbiologists and environmental scientists.

The YES Network is launching an online journal to showcase Network projects and work.

Issues:

- (1) Expansion of the YES Network vs. leadership team availability. To combat some of the negative effects of their rapid growth, YES has recently advertised and filled Regional Representative position's to improve communications between Chapters and its members.
- (2) Financial constraints affect the running of the Network, both for general Network business administration and support for YES Network Congress' attendance.

Future Projects:

Continual aim to link-in with the major meetings of EGU, AGU and GSA by holding YES Network convened sessions at these meetings. YES is also in communication with the AAPG Young Professional and Student Groups. National Chapters are working with the geological and other geoscientific societies in their countries to raise awareness of the existence of YES (e.g. publishing articles).

YES Funding Request from IUGS 2012:

In 2011, the Network received partnership funds towards joint sessions at EGU and GSA meetings. Funds have been allocated by the IUGS to the GeoHost program for delegate attendance at the 34th IGC and 2nd YES Congress.

YES Network request to IUGS for funding 2012:

- (a) €5000 to enable YES Network expansion by covering meeting attendance, marketing, and affiliate and membership costs.
- (b) €2500 for travel for one member of the YES Executive Board to attend the 34th IGC and 2nd YES Congress.

Total request: €7500

- **ACTION ITEM # 28.** President Alberto RICCARDI to respond in writing to all of the Affiliate members regarding the individual the annual reports and send them the new guidelines for compliance to the IUGS Affiliated Organizations.

6. INTERNATIONAL GEOLOGICAL CONGRESS (IGC)

6.a. 34th IGC in 2012 (Brisbane) — Ian Lambert and Paul Kaye

Agenda item: Status Report – 34th International Geological Congress (IGC)

Introductory remarks

The 34th IGC will be held at the world class Brisbane Convention and Exhibition Centre from 5-10 August 2012. It will be the shortest modern IGC. This report summarises the support offered to the IUGS EC and progress since the last IUGS EC meeting.

IUGS Support from the IGC

For the IUGS Executive Committee, the IGC offers:

- free full congress registration (for 10 persons) and accompanying member registrations for spouses;
- free congress dinner tickets for members and spouses;
- free use of the VIP centre at the Brisbane Convention and Exhibition Centre (BCEC) for the duration of the congress, as a private office and meeting facility, etc. from Sunday 5 August 2012 onwards.

The above will be provided at no cost.

We could also provide 10 hotel rooms at Rydges Southbank, attached to the venue, but the costs of these will need to be deducted from the capitation acquittal for the event.

In addition, the IGC earlier agreed to allocate 4 prime exhibition booths to the IUGS.

Program

The first Council meeting will be held on Sunday 5 August and the Second on Thursday 9 August. It is proposed that the consideration of the revised IGC and IUGS Statutes and the consideration of bids for the 36th IGC will be scheduled for the second Council meeting. It is also proposed that no individual member of Council will be permitted to carry more than 5 proxies from countries who are not represented at the Council meetings.

The IGC opening ceremony will be the first session on Monday 6 August 2012, lasting about 1.5 hours. The closing ceremony will be in the last session of 10 August. It is suggested that the IUGS Awards ceremony be incorporated into the Closing Ceremony.

Most business meetings will be held during the evenings. Several general assemblies will be held concurrently with the scientific program.

Circulars

The Third Circular was published in October 2011. This set out the general schedule for the 34th IGC, Registration Fees, an update of the Scientific Program, outlines of Field Trips, professional development courses, and training workshops for developing nation delegates.

The Fourth Circular, which was distributed in early February 2012, provides further information on the scientific program, details of the field trips and workshops.

Abstracts

The published abstract submission deadline is 17 February 2012. There will be an unpublished grace period of 7 days, after which abstracts cannot be accepted. At 24 January 2012, 309 fully paid and 538 GeoHost abstracts had been submitted electronically.

Sales of Early Bird registrations

Super Early Bird registrations, which closed at the end of September 2011, were oversubscribed (588, which exceeded the target allotment of 500).

Early Bird registrations are selling reasonably well. The categories available are Full (Member of a society) = \$995; Full (non- Member) = \$1195; Student = \$550; Young Earth Scientist = \$795) and Accompanying = \$155. Fees for all categories will rise at 1 May 2012.

At 30 January 2012, a total of 1077 registrations had been received.

Sponsorship

Finances are an ongoing issue. Registration fees are likely to cover roughly half of the total cost of the

event. Vale, the world's second largest mining company, is the major sponsor of the Congress. Several other companies have committed to lower sponsorship packages. The major Brisbane-based media/PR consultancy firm, Rowland, will provide media strategy and support for the IGC on a pro-bono basis equivalent to a Major Sponsor (AUD75,000). As Rowland has many resource companies on its books, it is hoped that they will help bring in more sponsorship.

Field Trips

Itineraries and start and end times and locations, costs and logistical details for the fifty IGC field trips throughout the Oceania region were detailed in the Fourth Circular.

GeoHost Program

Training Workshops

Funded Training Workshops will be a key means of bringing young and developing country delegates to the Congress. Total funds raised for these amount to roughly AU\$1.2 million. The three Training Workshops are:

TW1. Sustainable mining in Africa, funded by AusAID's Australia-Africa Partnerships Facility, delivery by UQ's Sustainable Mining Institute and others.

TW2. Geological sequestration of carbon dioxide, funded by the Global Carbon Capture and Storage Institute, delivery by GA.

TW3. Capacity building in risk modelling for natural hazards in the Asia-Pacific, funded by AusAID, delivery by GA.

Following a detailed selection process involving the Professional Conference Organiser, AusAID, the Global Capture and Storage Institute and GA, all IGC GeoHost Training Workshops were finalised in January. The PCO distributed letters of notification to unsuccessful and successful applicants in January. In addition some people are on a waitlist pending receipt of confirmations from those who have been made offers.

Funded Delegate Program (FDP)

Under the FDP, an additional amount of roughly AU\$150,000 has been allocated to provide free registration and \$1,500 support for selected young geoscientists and applicants from low income nations. The selection process was completed in late January and successful and unsuccessful applicants were notified subsequently.

Again, some people are on a waitlist pending receipt of confirmations from those who have been made offers.

The details for the highest ranked young FDP applicants have been forwarded to the IUGS EC for their consideration for the Hutchison awards.

Support for young US delegates is being arranged separately, through Wesley Hill. The highest ranked applicants from the US process will also be submitted for consideration by the IUGS EC for Hutchison awards.

Finally, an application was submitted in early February for funding of additional delegates from southern Asia under AusAID's International Seminar Support Scheme.

Professional Development Workshops

Approximately 30 Professional Development Workshops/Short Courses are being offered. Further information can be accessed at www.34igc.org.

Scientific Program / Plenary Program

A detailed Scientific Program including 38 Themes, more than 200 Symposia and the details for the responsible international scientists was drawn together by Scientific Subcommittee.

The 34th IGC Scientific Program will feature a daily Plenary Session (1300-1400) in the main auditorium

in which distinguished speakers will give invited presentations on major contemporary themes in the geosciences:

- Resourcing Tomorrow: Meeting the needs of a growing population
- The Earth and Man: Living with a Restless Earth
- What does the geological record tell us about past climates in relation to projected climate change?
- Energy in a carbon-constrained world
- Digital Earth - The information explosion

These plenary will be videoed for streaming via www.34igc.org after the Congress.

GeoExpo

170 booth spaces (out of the 214 available) were allocated at 30 January 2012. As a result of this success, a floor plan redesign by the PCO will make a new total allotment of 234 booths available. Our arrangement with the Brisbane Convention and Exhibition Centre (BCEC) means that we can arrange additional exhibition space if required.

YES Congress

The 34th IGC will incorporate the second Young Earth Scientists congress, the Australian Earth Sciences Convention and other major geoscience events to be held in 2012.

Episodes

A special 34th IGC Edition of *Episodes* is on track to be published by March 2012. All papers have been peer reviewed and submitted to the Editor of *Episodes*. Supported by Geoscience Australia, this publication will include overview papers and articles on the geological settings of the regions where the IGC field trips are to be held.

IGC Book “A Geology of Australia”

Geoscience Australia authors are working with the organisation’s graphics and published specialists to finalise design of the IGC Book. This high quality, coffee table style book is on track for publication in mid 2012.

Promotional Activities

Marketing of the 34th IGC is an ongoing effort. GA is supporting promotion at a number of national and international geoscience events along with advertisements in scientific publications. Events Queensland (an arm of the Queensland Government) agreed at the 6 December 2011 Organising Committee to provide further additional funds to the IGC for international promotion in 2012. A listing of upcoming promotions for the IGC is available at <http://www.34igc.org/upcoming-promotions.php>.

Dr Ian Lambert
Secretary General
34th International Geological Congress

Paul Kay
Deputy Secretary General
34th International Geological Congress

500 applicants from Africa - Aberra – Peter Bobrowsky brought up the fact that all organizations are on a FY budget. Tough to pay registration early -- \$40 fee for abstract delivery. Will consider arrangement for grace period. 10-day grace on abstract they will bend. Consider a two for one – a keynote or invited speaker can have a two for one.

6.b. 35th IGC in 2016 (Cape Town) – Rapporteur: Danie Bernardo

. During 2011 a number of meetings of the LOC were held to discuss progress: the last meeting was on 27 November 2011. The committees and subcommittees of the LOC were finalized and a logo to be used for the branding and promotion of IGC35 was adopted. A preliminary website for the event has been constructed and is available at: <http://www.35igc.org>. A number of meetings have been held with prospective sponsors, and meetings took place with the Cape Town and Western Cape Convention

Bureau of Cape Town Routes. A Section 21 (without profit) company is being registered to assume the legal responsibility for IGC35. The registration process is in place, but the final registration is currently awaited. Preparations for the IGC35 exhibition at the Geoexpo of the 34th IGC, to be held in Brisbane in August 2012 are underway. A high-exposure booth has been acquired and preparation of promotional material and the closing function are progressing.

The Field Trip subcommittee of the Scientific Committee under the chairmanship of Dr Christopher Hatton, is working on the proposal of a number of field trips in South Africa, the Southern African region (SADC) and further afield in Africa.

The International Geological Congress Committee (IGCC) held a site visit and business meeting at the Cape Town International Convention Centre (CTICC) on 6 & 7 November 2011.

IUGS-IGC 35 MOU is being negotiated.

- **ACTION ITEM # 42.** President Alberto RICCARDI to inform IGC LOC South Africa that the revised version of the MOU was approved by IUGS EC and will be signed upon approval of some minor additions.

6.c. 36th IGC in 2020, proposals (Canada, Spain, India) Rapporteur: Alberto Riccardi

Final proposals are due in April – Canadian submission: the designated site is Vancouver. Alberto Riccardi expressed that the presentation and business model were excellent. The estimated attendance is between five and seven thousand with a possible attendance of 10 thousand. The Scientific Program is already outlined. There is \$60K in seed funding which is already secured and an exhibition of 300 booth participants. Vancouver convention center 4 city block, detail of accommodations more than 13000 hotels. 2nd largest country in the world with easy access and numerous flights. Final presentation next April.

India – letter theme basic science for sustainable future. New administrator for earth science. Explanation of situation of geological features in India. Site not yet defined Final presentation in 2012 April.

Spain – presentation made by Chief of External Affairs, Geological Survey of Spain. An IGC was held in Spain in 1926, Now is time to renew and revise geological knowledge. Spain has varied geological heritage, and many geologists come to Spain to teach and work in geology due to the geological richness in natural features. Spain is rich in Karst and isextraordinary site for volcanology – have old and new volcanoes for study. There are also paleontologically rich areas, and Spain is the site of seven UNESCO Geoparks. There are many trained geologists in Spain. The proposed site is San Sebastian with its International Convention Center.

6.d. IUGS participation at 34th IGC

6.d.1 IUGS Exhibition – Rapporteur: Wesley Hill

IUGS Booth Size:

The IUGS premiere booth space will be Block W on the attached exhibit hall floor plan, which are booths #209 - #214 and is a six 'block' space. Each 'block' of space is 3m x 3m (9m total length.) The total space for Block W is 54sq m. (6 blocks of 3m x 3m.) Walls can be ordered and configured in various pattern options at 2.2m height.

Booth Partners:

The main partner sharing the booth space with IUGS is UNESCO. UNESCO panels/exhibits will focus on their Earth science initiatives and IGCP 40th Anniversary. The IGCP book will be given out. UNESCO has given notice that they may need to scale back on their original exhibits plans due to new budget constraints.

Additional partners sharing the booth space will be IUGS Commissions, Task Groups, Initiatives, and

Episodes. A letter of invitation was sent out in January to all the IUGS organizations with a 'materials form' for them to complete by April. Their completed forms will include what materials they plan to distribute and requested space requirements within the booth space. All booth partners will staff the IUGS booth during various time slots and I will be coordinating the booth staffing 'sign-up' and schedule.

Exhibits, Displays & Materials:

We plan have a flat-screen monitor (42" LCD Screen) to play the IUGS video, any UNESCO video, Geoparks video, World Heritage video, Commission videos, etc.

The new version of the IUGS video will be distributed on flash-drive sticks. It is also possible to distribute the IUGS Annual Report and IGCP book on the flash-drives as well.

I will be coordinating the IUGS pull-up panel exhibit design, text, and printing. The panel exhibit dimensions are attached. For discussion and approval from the EC, proposed themes of each panel are below:

- Commissions, Task Groups, Initiatives
- Joint Programmes & Initiatives
- Affiliate members (??)
- Adhering Members (??)
- Publications
- IGCP
- General IUGS

The thought is to have individual pull-up panels on each theme (size 1m x 2.2m). The panels can then be easily re-used and shipped to various meetings depending on which theme should be represented at a specific meeting. The overall look of all the panels will be consistent and similar as to when they are set-up together they have the same look and design. The final panel text and design will need to be approved by the Publications Committee.

Attached is information regarding 'flag banners' which you commonly see at major conferences and congress'. We could have 2 smaller indoor flag banners 'book-marking' the IUGS booth space to draw attention, and/or have 2 larger size banners outside the IGC hall main doors to represent IUGS as the major scientific partner. The flag banners would only be the IUGS logo and could be re-used at any event in the future. Information attached.

Cost Estimates:

- 1m wide pull-up banners: \$570 USD per banner (6 panels approx. \$3500 USD)
- Graphic designer to design/size the banners/lay-out: \$50/hour approx. 4hrs/panel x 6 panels= \$1,200 USD
- 42" LCD Monitor Screen \$680 USD
- Booth furniture costs: tables, chairs, & material racks (unknown at this time)
- Flash drives to distribute new IUGS video:
 - option (1): 1000 pieces \$5.50 each = \$5,500 USD
 - option (2): 500 pieces \$5.85 each = \$3,000 USD
 - Plus \$100 for shipping charge

- Flag banners (optional):
 - Outdoor flag banner 1m x 2m - \$670 USD (\$1350 USD for 2)
 - Indoor flag banner .7m x 2.2m - \$500 USD (\$1000 USD for 2)

Approximate total budget for all IUGS exhibits & flash drives: \$15,000

The exhibition is discussed at length. It is decided:

- Determine Theme of Panels and each theme will relate to IUGS and include the IUGS Logo on each panel.
- IUGS will approve content of panels and the Booth
- Develop template for Panels – this should be seamless and with IUGS standing out
- Flash drives including video, and annual reports will be ordered
- 100 copies of Annual Reports shipped by the Secretariat
- Unisex scarves will be ordered by Zhang Hongren

- **ACTION ITEM # 51.** Councillor Wesley HILL to produce draft text for all the posters in Brisbane.

6.d.2. IUGS Reception – Rapporteur: Rich Calnan

The Old Government house will be the site of a reception for 200 persons on Monday, August 6 for 2 hours. IUGS will invite 5 from Auckland University. With the Adhering & Affiliate members invited first on list and then proceeding to fulfill the remaining 200.

- **ACTION ITEM # 44.** Secretariat to proceed with the IUGS reception details in Brisbane.

6.d.3. Affiliate Members Meeting - Rapporteur: Alberto Riccardi

Affiliate member meeting on 7th August to promote interaction will affiliate orgs. According to Aberra Mogessie is a good opportunity for IUGS to improve relations.

- **ACTION ITEM # 55.** President Alberto RICCARDI to prepare an agenda for the meeting with Affiliate bodies at the next IGC.

6.d.4. Scientific Sessions - Rapporteur: Colin Simpson

37 themes throughout the IGC.

6.e. IGC Statutes – Rapporteur: Pat Leahy

Strategy IGC cannot be mentioned without mentioning IUGS Council is the decision maker which happens once every 4 years.

- Review of former council minutes
- IUGS and IGCC two separate statutes.
- Statute & Bylaw Committee
 - Leahy
 - Arne Bjorlykke
 - Jacques Charvet
 - Ian Lambert
 - Eldridge Moores
- Met in Paris and attended by AR
- Recommendation to evaluate
- Progress spring asked to chair & reviewed mandate

- Committee met and performed a line by line review
- Feb – Oct – review and submission
- IGCC approval in Cape Town
- Feb. 2012 submission of IUGS statutes

Next steps:

- Approval and revision of statutes to move forward.
- Send revised documents to Adhering orgs.
- Review of comments
- Approval of Statutes by IGCC and EC – the approval of the IUGS draft Statutes in principle as presented were approved by Majority vote by the EC on February 17, 2012 in San Sebastian.
- Presentation and vote on approval by Council at IGC Brisbane in August.
- Statutes must be sent prior to 3 months must completed by April to be considered in August for approval.
- Need to be in concert with IGCC and IUGS before moving to August.
- Statutes will be provided in a separate hand-out.

6.f. International Geological Congress Committee (IGCC) - Rapporteur: Alberto Riccardi

The IGCC is in charge of looking after the permanent interest of the Congress in close collaboration with the incoming Organizing Committee (IGC Statutes 5.1).

The IGCC consists of: a) the President and the Secretary General of the ongoing Organizing Committee, b) the President of the immediate past Session; c) the President, the Secretary General and the Treasurer of IUGS; d) the Secretaries General of the three immediate past Sessions (IGC Statutes 5.6).

During 2011 the IGCC met in Cape Town on November 7 - 8, 2011. As a result of the meeting the IGCC:

- 1) Approved the minutes of the last IGCC meeting held in Brisbane, Australia, on 24 – 25 June 2010;
- 2) Was impressed by the venue of the 35th IGC and noted that the Preparatory Committee is doing a good job. The IGCC recommended that the Preparatory Committee look into: (i) Any revisions that it wishes to make to the draft MOU with IUGS, which should be re-submitted for consideration by the IUGS Executive; (ii) Digital vision for 35th IGC; (iii) Science program to balance continuity with local flavor; (iv) Broad geological coverage of field trips; (v) Special Issue of Episodes.
- 3) Evaluated the outline of proposals received for the 36 IGC from Canada, India and Spain - possible venues proposed are Vancouver, Hyderabad, Mysore or Delhi, and San Sebastian-. The three final proposals are to be received by 30 April 2012. It was considered that as the IGCC role is to help improve quality of bids it is necessary to have a series of standard questions/criteria required for a bid, with a view to being able to compare like with like. The outlines of the responses to be sent to Canada, India and Spain were agreed. The IGCC decided that it will develop detailed guidelines for bids, which will be distributed to the bidding countries with from the IGCC co-chairs. This should be followed up by IGCC making a formal “Instructions to bidders for IGCs”, which should be available on the web.
- 4) Evaluated the changes proposed for the IGC Statutes. A majority of the IGCC agreed that the revised Statutes should be supported; acknowledging that there will need to be consideration of corrections and issues rose in writing by IGCC and IUGS EC. It was agreed that comments and corrections should be supplied by email to the IGCC Secretary by 15 December. The next revised version will be prepared in time to be considered by the IUGS EC at its February 2012 meeting in Spain.
- 5) The issue to study the possibility to have of IUGS-IUGG Joint meetings, raised by the German IUGS Committee and EuroGeosurveys was evaluated. It was informed that a meeting was held between IUGS/IGC and IUGG on 21 Feb 2011 to discuss greater coordination and collaboration. It was also mentioned the possible advantages in scheduling IGC meetings more frequently. It was decided that these issues should be included on the agenda for discussion at the next IGCC meeting.

The next IGCC meeting will be held in Brisbane, at the 34th IGC on August 2012.
On 15 December 2011 the IGCC Secretary forwarded to the Statutes Task Group all comments received on the proposed changes to the IGC Statutes.

6g. IUGS-IGC Council Meeting Rapporteur: Arne Björlykke – Alberto Riccardi

6.g.1. Agenda

- August 3 – Bureau Meeting
- August 4 – Last EC Meeting (a.m.)
- August 4 – IGCC
- August 5 – 1st Day Council Meeting
- August 6 – Evening IUGS Reception
- August 7 - Affiliate Organization Meeting in the afternoon
- August 8 – GMW – All Day
- August 8 – GGI Meeting -- 04:00 – 06:00 p.m.
- August 8 – Yes Session – 06:00 to 08:00 p.m.
- August 9 – 2nd Day Council Meeting
- August 9 – ½ day EC Meeting
- August 10 – 3rd Day Council Meeting
- Sampat Tandon will take charge of the GGI Initiative with Wesley Hill's assistance.
- 8/8 6:00 – 8:30 – YES Meeting: Engaging in Policy Makers – IUGS Representative Ezzoura Errami will also sit in on panel discussion her Alternate will be Wesley Hill
- William Cavazza and Jacques Charvet are designated for the review of GARS & IGCP
- Sampat Tandon/Peter Bobrowsky will Chair the TGGGB
- Memorandum of Understanding for 35th IGC has been circulated.
- 34th IGC MOU should state the 10 free registrations for the IUGS EC members.

- **ACTION ITEM # 37.** President Alberto RICCARDI to inform YES President that the IUGS speaker for the YES session on 8th August 2012 at the IGC will be Councilor Ezzoura ERRAMI (alternate: Councilor Wesley HILL).
- **ACTION ITEM # 45.** Secretary General Peter BOBROWSKY to send a copy of the IUGS 2008 Secretary General Report for 2004-2008 to the EC.
- **ACTION ITEM # 46.** EC members should send their respective contributions to the IUGS 2012 Secretary General Report for 2008-2012 to Peter BOBROWSKY as soon as possible.

6.g.2. IUGS–IGC Statutes

6.g.3. Awards Presentation

6.g.4. Selection of venues for the 36th IGC in 2020

- Proposals submitted by April 1 and will be voted on at the IGC.

7. UNESCO

7.a. Earth Sciences at UNESCO Rapporteur: Alberto Riccardi

The Earth Sciences within UNESCO continue to play an important role in the framework of the work plan of UNESCO in 2012-13. While the end of 2011 and the beginning of the new biennium was marked by some unforeseen perturbations, we remain positive for the future and expect that the next UNESCO Executive Board, which will take place early in 2012 at the end of February, will see Member States of UNESCO come together to pave the way to continue our successful work.

There were some personnel changes during 2011. The IGCP Executive Secretary Mr Robert Missotten (Chief of the Global Earth Observation Section) retired in June 2011 and the recruitment of a successor is well underway. A replacement will be probably in place mid 2012. Mr Missotten expressed his satisfaction regarding the collaboration throughout many years with the IUGS, facilitating jointly international

collaboration in Earth sciences.

Ms Yolanda Berenguer another colleague from the Global Earth Observation Section retired in April 2012. Her successor Mr Yann Gavillot, a young geologist recruited through the UNESCO Young Professional Programme, has already arrived. He should in future become involved in all different projects, including IGCP and possible cooperation with IUGS.

Highlights and important improvements of the IGCP and geology websites, thanks to the great commitment of Marie-Laure Faber which IGCP would like to acknowledge. Thanks to a specific training, she could carry out some tasks as webmaster. This was an essential improvement especially in view of our enhanced visibility during the IGCP40 year.

Ms Margarete Patzak and Ms Sarah Gaines continue their work in the Earth Sciences at UNESCO with additional consultant support during the preparation for the 40th anniversary of IGCP from Mr Jean-Paul Cadet and Ms Aloé Schlagenhaut. Our field network remains strong with Earth scientists in UNESCO field offices in all regions of the world.

7.b. IUGS-UNESCO International Geoscience Programme (IGCP)

7.b.1. Report on IGCP Rapporteur: Peter Bobrowsky

Board members 2011-2012

The IGCP Secretariat with the help of the IGCP Chairperson added some new Board Members to our team. With the ultimate aim of having at least ten Board Members in each Theme group, we need to continue in this direction and could envisage a broader call for candidates with the cooperation of IUGS, as done in the past. We should focus on increasing future participation of women and Board Members from under-represented regions.

Please refer to the complete report submitted by Dr. Margarete Patzak. This provides a detailed summary of expenditures, activities. Etc.

Chairperson of the Scientific Board: Ms Vajda, Vivi (Sweden)

7.b.2. IGCP 40th Anniversary Rapporteur: Jacques Charvet

The IGCP is celebrating its 40th anniversary on February 22, 2012 with a series of publications, exhibitions and events at UNESCO headquarters, which will acknowledge the successes of IGCP for Earth Science in the Service of Society, as an outstanding and unique cooperative enterprise of UNESCO and the IUGS. We will look back on 40 years of success stories but also discuss the future challenges for IGCP and geosciences for our planet and put a strong focus on interactive panels and discussions. The overall aim of the event which will be organized February 22nd at UNESCO HQ in Paris is to raise the profile of the programme and the importance of its work. Up to date, 335 projects were active under the IGCP while the programme has received over 600 proposals since its foundation. IGCP is one of the important programmes of UNESCO's Natural Sciences Sector and was endorsed by UNESCO in 1972 just after the Man and the Biosphere Programme (MAB) which celebrated its 40th anniversary in 2011. The four-decade success story of the IGCP Programme and its 335 endorsed projects is the result of the dedication of project leaders and the enthusiasm, support and participation of geoscientists from around the world who continue to collaborate and share their work.

Since September 2011 the IGCP Secretariat (and Geo-team) has worked towards the IGCP40 event preparation. Due to the staff 'shortage' we hired two external consultants to help us cope with the additional workload and the planning, budgeting, and preparation of the IGCP40 event and related products (programme, invitations, IGCP40 book, flyer, conference material, exhibition, cocktail, side events, etc.). The work was not easy as a budget cut was announced in October after the events at the General Conference, where some Member States withdrew their funding support after Palestine was accepted as a new member of UNESCO. This created an extreme challenge for the IGCP Secretariat, but we succeeded to preserve certain funds and engaged some of the planned IGCP40 actions. We have

engaged 38,000USD in the preparation phase.

At this stage, we would like to greatly acknowledge the tireless enthusiasm and input in the work of the Earth Observation section of Aloé Schlagenhauf and Jean-Paul Cadet, whose contributions were essential given the huge amount of additional tasks and administrative workload. We would like to thank also Jacques Charvet (IUGS Vice President) who lives in France for being our contact partner with IUGS for the IGCP40 preparations, enabling us to organize a number of meetings with him in UNESCO Headquarters which facilitated our work together. Also, we appreciate the kind support of the IUGS secretariat, as Rich Calnan and Nancy Zeigler have offered their assistance for the IGCP40 celebration. Last, but not least, great thanks go to our Editor in Chief for the IGCP40 book, Edward Derbyshire. It is thanks to his great editing experience and knowledge of the IGCP that we succeeded to put together interesting chapters for the IGCP40 book. His enthusiastic contribution was essential for the production of this wonderful landmark of 40 years of IGCP success stories. This book will bear an ISBN number and is being published by UNESCO publishing in English, French and Spanish. It will be officially released on February 22nd.

7.c. Geoparks and Geoheritage

7.c.1. Global Geopark Network (GGN) Rapporteur: Colin Simpson – Jacques Charvet

The 10th European Geoparks Conference was hosted by the Gea Norvegica Global and European Geopark, with the support of the Norwegian National Commission for UNESCO who also participated in the Conference. The venue was the former fishing village of Langesund, in the south eastern part of Norway. It was a meeting with oral and poster presentations, covering a lot of different topics and hosting many fruitful educational exchanges. Joint projects were discussed in various smaller meetings and many new contacts were made. 250 participants came from Australia, Austria, Brazil, Canada, China, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Indonesia, Ireland, Iran, Italy, Japan, Malaysia, Netherlands, Norway, Portugal, Rep of Korea, Romania, Spain, Sweden, Switzerland, Taiwan of China, Turkey, Uruguay, Slovenia, UK, and USA.

The Geoparks idea is being adopted by an increasing number of countries and UNESCO supports these ad hoc efforts. Geoparks are becoming very popular due to their combination of conservation, sustainable development and community involvement. The role of UNESCO at the conference was to support Member States to establish Geoparks and give a keynote and say a few words at the opening and closing of the 10th European Geoparks Conference. During the Global Geoparks Bureau Meeting which took place in the framework of the conference, UNESCO and IUGS assisted in the selection of nine new Geopark members. As of September 2011 the Global Geoparks Network has 87 members in 27 countries.

The last months of 2011 also marked the extension of enthusiasm for Geoparks into new regions of the world: Latin America and the Caribbean and Africa and the Arab Region. The conference “Geoparques: una alternativa para el desarrollo local” was held in the city of Trinidad (Flores, Uruguay) from 13 to 16 November 2011. The first International Conference on African and Arabic Geoparks took place in El Jadida, Morocco on 21-28 November.

- **ACTION ITEM # 11.** Councillor Colin SIMPSON to write/coordinate an article on GeoParks for the next *Episodes* issue.

7.c.2. Geoheritage Rapporteur: Wesley Hill

Outside IUGS, further cooperation is taking place with ProGEO (the European Association for the Conservation of the Geological Heritage).

7.d. IUGS-UNESCO Programme on Geological Application on Remote sensing (GARS) – Rapporteur: Wesley Hill

The Geological Applications of Remote Sensing Programme representatives actively participated in the GEOSS process, in particular in the Ministerial Meeting on Earth Observation held in November 2011 in Istanbul, Turkey. GEOSS and GARS have developed a community of practice (CoP) in the field of geohazards to raise increased and stable funding for research and outreach activities. The interactive web space of this group can be found at: <http://www.geohazcop.org/>.

UNESCO participated in the second Geohazard Community of Practice workshop on Understanding Extreme Geohazards: The Science of the Disaster Risk Management Cycle took place in December 2011 in San Feliu de Guixols, Spain with the support of the European Science Foundation. A full report and meeting declaration can be found on the above webpage. On the recommendation of ESF, the participants of this meeting are preparing a white paper proposing further collaboration. A detailed report on the GARS activities of 2011 will be submitted separately.

Additional Report from Marsh.

TITLE OF CONSTITUENT BODY

Geological Applications of Remote Sensing Programme (GARS)

OVERALL OBJECTIVES: MISSION & GOALS

- 1) To demonstrate the uses of advanced remote sensing techniques in solving key geological questions, from primary through applied research and as a basis for operational systems, and so achieve integration of remote sensing techniques into normal workflows in the geosciences
- 2) To build capacity by ensuring transfer of information and technology through co-operative research, in combination with educational programmes, especially in developing countries
- 3) To support this through dissemination of results at appropriate scientific congresses

FIT WITHIN IUGS SCIENCE POLICY

The GARS Programme contributes to advancement of geological research and developing understanding of the earth system, in order to address problems of relevance to the welfare of the Earth's population. The GARS Programme focuses on 3 high-priority geosciences activities identified by IUGS in its 2004 Mid-term Vision and Strategic Action Plan:

- Reducing the vulnerability of communities to natural hazards (GEO Geohazard Theme)
- Managing resources and sustaining the environment (Groundwater Initiative)
- Understanding global environmental change (Both programme elements)

ORGANIZATION

The GARS Programme is sponsored jointly by IUGS and the UNESCO Ecology and Earth Sciences Division. Core programme membership includes 40 institutes and individuals from 28 countries, mostly from the developing world. The GARS Programme Chairman in 2011 was Professor Stuart Marsh of the British Geological Survey. The Programme Secretary was Mr Robert Missotten of UNESCO.

CHIEF ACCOMPLISHMENTS IN 2011

From the Geohazard Theme perspective, the highlight was an ESF-COST High-level Research Conference on Understanding Extreme Geohazards in Sant Feliu de Guixols, Spain in December 2011. This was Co-Chaired by the GARS Chairman and attended by the GARS Secretary and UNESCO staff. The Programme Committee had representatives from GEO, UNESCO, UNOOSA, UN-Spider, ICSU, and IRDR. 52 conference participants from four continents and a wide range of disciplines reviewed the current understanding of high-impact geohazards and the challenges posed to the disaster risk management cycle. Participants agreed on a declaration identifying specific actions that would address these scientific and societal challenges.

Within GEO there were two major accomplishments to which the GARS Programme contributed. Firstly, the matching of Supersites activity within the Americas by the development of longer term funding for Supersites within Europe. The Supersites initiative continued to operate during 2011, providing data and

scientific analysis for the Tohoku Earthquake and Tsunami in Japan, for example. In the longer term, the initiative aims to match this responsive, web-based mode of operations with a more strategic, research element. The securing of European Framework Programme funding for 2-3 longer-term Supersites in Europe, likely to include a Volcano and a major fault zone, was a significant step in this direction, set originally in the Frascati Declaration of 2007 under IGOS and refined in the GEO GHCP Roadmap developed under GARS auspices in 2010.

The second accomplishment within GEO was the inclusion of mineral resources in the GEO Work Plan for the first time. Secured through attendance at the GEO Work Plan Symposium in Geneva in May and confirmed at the GEO Plenary in Istanbul in November, this had GARS as only one of several players, but it presents a significant opportunity for IUGS and Geoscientists from 2012-15. The topic now features within two Tasks: Human Impacts for the study of pollution and waste management; and Energy and Geo-resources, for the more conventional resource exploitation aspects. Although GARS has not so far focused on minerals, this might now present an opportune moment to develop a Minerals Theme over the next 4 years to leverage further.

- **ACTION ITEM # 58.** Letter from President Alberto RICCARDI to GARS requesting information on the non-use of the allocation provided for 2011 and indicating that allotted funding for this fiscal will be provided after the ARC.

7.e. IUGS-UNESCO Task Group on Global Workforce (TGGW) – Rapporteur: Pat Leahy

The IUGS-sponsored taskforce on the Global Geoscience Workforce is focused on illuminating three distinct issues:

1. Establish definitions of comparability of data and information regarding the jobs, education, fields, and international mobility of geoscientists.
2. Determine a global baseline knowledge of the quantity and diversity of the geoscience workforce
3. Identify capacity-building strategies for a durable global competency in the Earth sciences. The participants in the taskforce are recruited from national organizations such as national geological surveys or national societies who have specific knowledge of the human resource capacity of the geosciences in their geographic region and/or a specific employment regime. Most of these individuals are expected to be middle-level professionals who have as a primary responsibility to monitor these issues for their institution and to advise their leadership.

During April 2009 the American Geological Institute began recruiting membership of the taskforce from the participants in the WSS-22 workshop at the 33rd IGC in Oslo, from contacts in industry and national geological surveys, and through recommendations of individuals in these populations. During that time, AGI recruited individuals from North America, Europe, Asia, Africa, and Australia, while nearing identification of individuals in South America and deeper exposure in Asia and Africa. During late 2010 and 2011 we identified additional contributing sources particularly in Africa and parts of Asia to help bolster the knowledge base for the taskforce. Latin America remains a challenge for membership and consistent information.

The primary focus in late 2010 and during 2011 has been:

- Promotion of preliminary results of the data to solicit additional participants and insights from the geoscience community
- Improving the understanding of the source of geoscientists around the world, especially by identifying as many geoscience academic programs as possible for the intent in ascertaining a more accurate assessment of new geoscience graduate production on a global/regional basis.

Promotion of preliminary results:

After the efforts of 2009 and 2010, first-order numbers for geoscientists by country and the gross migration trends of geoscience talent, and barriers there-to were compiled. We used this information to make presentations in a diverse number of forums. The intent of this issue was to generate discussion,

identify additional interested and knowledgeable parties to contribute to the effort and to ascertain the veracity of some of the overall trends that were becoming evident in the discussions.

Presentations were made at a number of conferences and meetings, including:

- GeoSciEd IV, Johannesburg, South Africa. Comparing “Geosciences” Across Borders and Cultures – How Seamless can the Geosciences Move Globally.
- AGU 2010 Annual Meeting, San Francisco, California. How Global Science has yet to Bridge Global Differences
- EGU General Assembly 2011. Session convened: Cultural and Political Impacts on Building Global Geosciences Human Capacity
- EGU General Assembly 2011. Presentation: A Global View of the Geoscience Profession: Updates from the IUGS Taskforce on the Global Geoscience Workforce
- U.S. National Committee for Geological Sciences, The National Academies, Washington, D.C. Development of the Geoscience Workforce: Current Practices and Future Needs.
- Geological Society of America 2011 Annual Meeting, Minneapolis, MN. Global Science, Global Problems, Local Dependencies

In addition, data from the IUGS Global Geoscience Taskforce was a major part of the following article in the 2011 EAGE Recruitment Special magazine:

Gonzales, L., Keane, C., Venus, J. (2011) *Global change faces the geoscience profession*. EAGE 2011 Recruitment Special, 8-12.

This process did identify a number of interested participants from Central Asia and the Middle East that, in addition to current members, will be asked to help build on the information we compiled on our second major 2011 task on expanding our understanding of the global geoscience academic programs.

Understanding the source of geoscientists

Historically the American Geosciences Institute has been recognized as having the most extensive database of academic geoscience programs in the US and around the world. As of 2008, AGI had verified the existence of 724 academic geoscience programs in the United States and 284 academic geoscience programs outside of the United States. Though extensive, it was recognized this was not comprehensive in scope, which would require substantial local knowledge in most countries in the world. In 2011, AGI enlisted the assistance of two of its partners to help expand the database to be as encompassing as possible. The two primary weakness in the database were in community colleges in North America and 4-year programs in Africa and Asia. AGI worked with the College of William and Mary in Williamsburg, Virginia with funding from the US National Science Foundation to begin an exhaustive search of 2-year geoscience programs in the United States, which is a major entry point to higher education in the US for underrepresented population and immigrants and temporary residents. Likewise, AGI also worked with the YES Network to enlist the assistance of their 1,900 members across 108 nations to identify academic geoscience programs that were previously not recognized in the AGI database.

The results of these efforts saw the database expand to 1,066 identified academic programs in the United States and 1,276 academic geoscience programs outside of the United States. Also, an additional 112 geological surveys in 63 countries were also identified. As of December 2011, AGI is doing quality control on this extensive increase in new data and expects to publish the 47th Edition of the Directory of Geoscience Departments with all of these programs fully identified in early 2012. Once published, copies of this publication will be forwarded to the IUGS Secretariat.

By way of this report, AGI is also requesting permission to recognize IUGS through the use of its logo on

the next edition of the Directory of Geoscience Departments and in follow-on requests for degrees data from the identified programs.

Of the \$1000 provided to AGI for the IUGS Taskforce, we have provided \$250 to support the YES Network's efforts in 2011 to identify all of these institutions. In 2012, we expect to press hard to identify the number of graduates being produced at these institutions and hope to engage the YES Network again in this effort, for we expect to provide additional support to at that time.

We would also like to acknowledge Thomas Schluter of the Department of Geography, Environmental Science, and Planning at the University of Swaziland for his report "Evaluation of Geoscience Education at African Universities." This was an invaluable source of information for this effort regarding programs in Africa.

Next Steps

In 2012 there are three primary efforts expected for the taskforce. First, we plan to utilize the new knowledge of academic geosciences departments to begin gaining an understanding of the degree production in those programs and to better understand the supply-side of the geosciences human capital system. Second, we will re-engage the active membership to update the state of geosciences in their area of expertise, especially in regards to levels of employment and migration trends. Third, AGI and AIPG are hosting a workshop at the IGC in Brisbane to look at issues of licensure and accreditation of geoscientists and geosciences programs around the world. This particular issue is the defining difference between the geosciences in most countries, and we hope to engage a broader population to flush out the trends, issues, and potential collaborations which may improve mobility of geoscientists and improve the understanding of how geoscientists are actually defined and classified globally.

Currently, the taskforce includes the following participants:

Moutaz Al-Dabbase, Geological Society of Iraq
Jay Barton, University of Witswatersand (Ret)
Sarah Gaines, UNESCO
Alireza Gharagozlou, Geological Survey of Iran
Leila Gonzales, Matrix Knowledge
Christopher Keane, American Geological Institute
Michael Loudin, ExxonMobil Exploration Company
Edmund Nickless, Geological Society of London
Jacques Varet, BRGM
Andrew Waltho, Rio Tinto
YES Network

7.f. Earth Sciences Education Initiative on Africa Rapporteur: Wesley Hill – Alberto Riccardi

The UNESCO Earth Science Education in Africa Initiative completed its scoping phase with a workshop in Kinshasa, DRC in February 2010. A consolidated report of all the workshops has been prepared and can be found on the UNESCO website. At the Colloquium of African Geology at the University of Johannesburg, South Africa in January 2011, three initial activities were launched: 1) Training in geologic mapping, 2) development of an African network of Earth Science Institutions within the existing UNESCO African Network of Science and Technology Institutes (ANSTI), 3) Support earth science education at primary and secondary levels. At this event the Geological Society of Africa endorsed the findings of the scoping workshops conducted under this Initiative. UNESCO continues to seek external partners to finance the implementation of these activities.

Taking advantage of the experts gathered for the 40th anniversary celebration of IGCP, USGS, IUGS-COGE and UNESCO are organizing a day of events on Geo-education at UNESCO. The morning session will provide updates and discussion on the UNESCO Earth Science Education Initiative in Africa and the afternoon session will look at the relationship between Earth Science education and research globally.

UNESCO continues to work with COGE and IGEO to develop mutually beneficial collaboration. Besides this initial formal collaboration with COGE to host the Geoeducation workshop at UNESCO in February 2012, UNESCO is working with IGEO to develop an activity related to the focus on primary and secondary level education. Djibouti has expressed interest to be the pilot country for this work and to host a relevant meeting, although IGEO's proposed fundraising efforts will be necessary to make this a reality. It is essential that this activity be developed in close cooperation with the UNESCO African network. The Geological Society of Africa has sent to the IUGS President two proposals, one for the establishment of one Center of Excellence for Water Management at the Assiut University in Egypt, and another one for the creation of a Center of Paleontological Studies of Southern and Eastern Africa in Mozambique. Both projects will be considered in relation to other activities being developed by both IUGS and UNESCO in the field of education in Africa.

8. REPORTS ON OTHER PROGRAMMES

8.a. IUGS-IUCN (World Conservation Union) geological World Heritage – Rapporteur: Wesley Hill

Agreement and Partnership Intent:

IUCN (The World Conservation Union) as advisory body to the UNESCO World Heritage Committee on natural and mixed World Heritage sites, seeks to work closely with international earth science expert groups in particular with regard to the evaluation of properties nominated for World Heritage status on the basis of the World Heritage Convention criterion (viii) which relates to geology and geomorphology. IUCN desires to work closely with IUGS as a formal partner to assist with the evaluation work. In 2006, IUGS signed a MOU Agreement with IUCN with the main focus of the partnership that IUGS provide geologic desk-top reviewers and evaluations of the new World Heritage site applications. The partnership effort between IUGS and IUCN complements a similar agreement and partnership between IUGS and the Global Geoparks Network (GGN).

This 2011 report summarizes cooperation between IUGS and IUCN on the topic of evaluating new geologic site applications for World Heritage status 2012.

Partnership Principles:

Beginning in 2007, IUGS invited experts within its membership community to volunteer to conduct desk-top evaluations of geologic based sites proposed to IUCN for World Heritage designation upon approval by the UNESCO World Heritage Committee.

Each year, the IUGS liaison distributes a specific invitation to perform a desk-top review of a site application through the IUGS E-Bulletin, the IUGS Task Group on Geoheritage, the Global Geoparks Network evaluator list, and through the IUGS Geoheritage database. A database of geoheritage volunteer evaluators was developed by Dr. Peter Bobrowsky and continues to be maintained and added-to each year.

Each July/August, IUCN provides the IUGS liaison with a list of the new candidate World Heritage sites that have been nominated under criterion (viii) (geoscience) and which warrants an expert within the geosciences to evaluate the application to determine the site's 'Outstanding Universal Value'.

By Agreement, IUGS provides names of approximately 10 desk-top evaluators with qualified expertise per nominated site and who has agreed to perform such a review of the application. Names are provided to IUCN by late September who then contacts each expert with the confidential site application files and evaluation forms and guidelines. The IUGS liaison sends a 'reminder to submit' email in order to assist IUCN with receiving the evaluations within the required deadline. IUCN acknowledges fully the input of IUGS, including in its reports and presentations that are required to be presented annually to the UNESCO World Heritage Committee.

Summary of the Reports Submitted to IUCN in 2011:

4 sites nominated under criterion (viii) for WH consideration 2012:

- Lacs d'Ounianga, Chad
- Chengjiang Fossil Site, China
- Lena Pillars, Russian Federation
- Nahal Ma'arot / Wadi el Mughara Caves / Mount Carmel, Israel

45 reviewer names were submitted to IUCN to evaluate the application dossiers for the 4 sites. 34 evaluation reports were received by IUCN from the pool of reviewers, ranging from short reviews to detailed and referenced in-depth statements.

Chad: 7 evaluations submitted (in French language)

China: 10 evaluations submitted

Russia: 9 evaluations submitted

Israel: 8 evaluations submitted

There was a significant increase in the number of evaluation reports submitted this year 2011 compared to 2010. About 82% of the evaluators submitted a report in 2011 compared to less than 50% submitted from the previous year.

Input by Tim Badman, IUCN Director, World Heritage Programme: "The input of IUGS is an important contribution to the work of evaluating proposals for new World Heritage Sites. The IUGS input this year has showed continued increase on the excellent input of previous years."

IUGS/IUCN Partnership Goals for 2012:

(1) As better recognition for desk-top reviewers, send a jointly signed letter by IUGS and IUCN thanking each of the 34 desk-top evaluators for their reports and expressing the importance of their expert evaluation and the desk-top review process.

(2) Update the 2006 IUGS/IUCN MOU Agreement

(3) IUGS invited to attend (as an observer) the 2012 UNESCO World Heritage Committee meeting and 40th Anniversary event.

IUCN Liaison:

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IUCN Director, World Heritage Programme
Rue Mauverney 28
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tel: ++41 22 999 0278
mobile: +41 79 521 8984
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IUGS Liaison:

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+303.357.1005 phone
whill@geosociety.org

Discussion followed and the EC agreed that a new MOU is not required. However the benefits to IUGS in this relationship are not clear so a TOR must be approved.

- **ACTION ITEM # 63.** Councilor Wesley Hill to update IUGS-IUCN TOR before the 34th IGC (Brisbane, August 2012).

8.b. IUGS-IUPAC Task Group on Isotopic Geology (TGIG) - Rapporteur: S.K. Tandon – No Report

8.c. OneGeology – Rapporteur: Alberto Riccardi

As reported in 2011, the IUGS has been formally involved with OneGeology since October 2009, when its President was kindly invited to become an ex-officio member on the OneGeology Steering Group.

Since then IUGS main goal in relation to OneGeology has been to support not only its interaction with the IUGS Commission on the Management & Application of Geoscience Information (CGI), but also with other IUGS bodies and with the 34th International Geological Congress (Brisbane 2012).

As one of the main contributions IUGS could provide to OneGeology is in the field of standards in the geosciences it has been considered a priority to establish a close interaction of OneGeology with the IUGS Commission on Stratigraphy (ICS) – a body working in stratigraphic standards which are basic to geological mapping. Here it is expected an OneGeology-ICS interaction similar to the one existing between ICS and the Commission of the Geological Map of the World (CGMW).

The 2011 meeting of the OneGeology Steering Group that was to be held at the Geological Survey of Japan, on 6-7 April 2011 was postponed due to the earthquake and tsunami that affected the eastern coast of Japan on 11 March. In its place the Steering Group held a Telephone conference on 7th April 2011.

Meetings of the OneGeology Operational Management Group and of the OneGeology Technical Working Group, were held at the British Geological Survey in Edinburgh on 1 and 8 July 2011, and the OneGeology Steering Group meeting finally took place in Tokyo on the 27th and 28th September 2011. Colin Simpson kindly accepted to represent IUGS President at the meeting. One of the main items discussed was the future of OneGeology, as the British Geological Survey will be withdrawing its funding of the Secretariat/executive team in October 23, 2012. Options discussed were: 1) Incorporated and wholly funded by sponsorship; 2) Wholly funded by one, two or more hub geological surveys (as now); 3) Co-funded by geological surveys and sponsorship (a blend option of options 1 and 2); 4) Terminate OneGeology. Option 3 was adopted – supported by IUGS- and procedures began to have OneGeology formally registered as a “not-for-profit Charity Company Limited”. This process will be completed before the International Geological Congress in Brisbane in August 2012. Another main issue discussed by the Steering Group was the future goals and directions to allow updating and improvement of OneGeology data in the near future. A list of 14 “possible future goals” for OneGeology was circulated on 26 October 2011 for the Steering Group to select 5 of these goals. IUGS supported goals 2 (Harmonizing terms and concept -semantic interoperability-), 3 (Consistent single global geology data fed), 8 (Extend and intensify technical and knowledge exchange and outreach activity in less developed countries), 9 (Simple -15?- lithology legend); 11 (Improved topographic base layer).

Another teleconference of the OneGeology Steering Group was scheduled for the end of 2011, but was postponed for February 15 2012.

The OneGeology Web Services Accreditation Scheme was launched on 27 July 2011 to provide an incentive for geological surveys organizations participating in OneGeology and help them to be more responsive to the needs of current and potential users of their map data. Practicability, attainability and simplicity of operation have been the key points in the design of the scheme. There is a star rating according to the level of service attained which is related to the technical and service parameters to be met, from a Basic Web Map Service (WMS) (one star) to a Enhanced Web Feature Service (WFS) (five star), with three intermediate levels: Upgraded Web Map Service (WMS) (two star), Enhanced Map Service (WMS) (three star) and Web Feature Service (WFS) (four star).

During 2012 OneGeology has strengthened linkages with UNESCO Geoparks network, to create a map of GeoParks and World Heritage sites that are geologically-related. The information included in the OneGeology webpages links geological landscapes and sites with the geological maps data provided in the OneGeology portal.

Lately and in relation to the creation of OneGeology Limited a list of Intellectual Property Rights and Assets was prepared in order to be assigned to the new corporation with a clear separation of those that belong to external parties, such as technical and scientific standards that belong to IUGS-CGI and the

Open Spatial Consortium.

The OneGeology Steering Group now comprises 7 Directors, one for each continent. On December 2011 there were 117 participating countries, and over 50 countries and 7 states/provinces were serving data. There were 229 WMS (Web Map Services) and 23 WFS (Web Feature Services) data layers being served through the portal. The data has come from 57 data providers and is being served by 46 service providers. There are one or more layers for 51 nations, 20 continental or other large world regions and 8 smaller sub-national regions.

During the 34th IGC One Geology will hold its main meetings for 2012 and plans to have Operational Management and Steering Group meetings, along with Directors open meeting. Other events include the symposium sessions, an exhibition booth, a social evening and a competition.

8.d. Group on Earth Observations (GEO)--(GEOSS) Rapporteur: Alberto Riccardi

As informed last year the IUGS was recognized as a GEO Participating Organization at the GEO-VI Plenary session in Washington DC, on 17 November 2009. IUGS representatives, i.e. GEO Principal and GEO Principal Alternate are, respectively, IUGS President, Alberto C. Riccardi, and IUGS Councilor, Wesley Hill.

The GEO is a voluntary partnership of governments and international organizations. Membership in GEO is open to all member States of the United Nations and to the European Commission. GEO Members currently include 87 Governments, the European Commission, and an additional 64 intergovernmental, international, and regional organizations, with a mandate in Earth observation or related issues. Participating Organizations include, among others, ICSU and UNESCO (including the UNESCO-IUGS joint program GARS), as well as some ICSU GeoUnions. The GEO is coordinating international efforts to build a Global Observation System of Systems (GEOSS), with the aim of constructing a global public infrastructure for Earth observations that, like the Internet, will consist of a flexible and distributed network that connects users to existing data bases and portals and provides reliable, up-to-date and user friendly information. GEOSS is simultaneously addressing nine areas of critical importance to people and society: Disasters, Health, Energy, Climate, and Biodiversity.

During 2011 IUGS has participated in a number of activities in order to support GEO's work: 1) Survey progress in the area of Architecture and Data Management; 2) Ratification of IUGS Principal designation; 3) agreement with the GEO 2012-2015 Work Plan version submitted for review, which has the following objectives: a) the implementation of an operational and sustainable GEOSS offering full and open access and including interoperable observing, modeling and dissemination systems; b) the reinforcement of coordination, user engagement and resource mobilization; and c) the development of information products and end-to-end services tailored to serve society's needs across the nine Societal Benefit Areas; 4) Acceptance of a "List of Datasets for the GEOSS Data-CORE", i.e. "GEOSS Data Collection of Open Resources for Everyone", which was to be created as a follow-up of the "Beijing Declaration" at the Ministerial Summit and the GEOSS Data Sharing Action Plan accepted by the GEO VII.

The IUGS also participated in the Eight Plenary session of the Group on Earth Observations (GEO-VIII) which was hosted by the Scientific and Technological Research Council of Turkey (TUBITAK) at the Istanbul Congress Center on 16 – 17 November 2011. The meeting was attended by representatives of 49 Countries and 30 Participating Organizations. IUGS President was kindly represented by Vice-president Jacques Charvet, who during the meeting reported that IUGS is actively participating in GEO through the Geological Application of Remote Sensing Program (GARS), which is co-sponsored by the UN Educational Scientific and Cultural Organization (UNESCO) and is participating actively in setting the Geohazards Community of Practice. It was stated that IUGS is pleased to see the appearance of the theme geo-resources theme in the societal benefit area Energy of the Work Plan IV and would like to be involved in that topic of Earth Sciences. It was also mentioned IUGS involvement in the OneGeology Initiative which, as remarked in 2010 when IUGS supported the "GEOSS Data Sharing Action Plan for the implementation of the GEOSS Data Sharing Principles", is an outstanding working example of that action plan. It was also ratified IUGS position, previously exposed at the Beijing Ministerial Summit (Beijing, 3-5

November 2010) that the IUGS is fully supportive of the important efforts being done by the Group on Earth Observations (GEO) to access and apply Earth observations, and that IUGS looks forward to a continued role in capacity building, and to the transference and sharing of scientific knowledge, in order to help reduce the gap between developed and developing countries, and, therefore, to have a more prosperous and equalitarian society.

As a result of the GEO VIII meeting several actions have been implemented, such as the introduction of changes in GEO Rules of Procedures, the establishment of two working groups, one to lead the new task in the “Institutions and Development” section of the 2012-2015 Geo Work Plan on “Advancing GEOSS Data Sharing Principles”, and the other, named “Post-2015 Working Group”, with the mandate to assess options and scenarios for the next phase of GEOSS implementation, including the scope of activities, institutional arrangements, internal governance and resourcing of GEO. For member of the first Working Group the IUGS nominated Kristine Asch, Chair of the IUGS Commission on the Management and Application of Geoscience Information (CGI), although after being nominated she requested to be replaced by François Robida. For the Working Group “Post-2015 Working Group”, the name of Robert Missotten has been suggested by Vice-President Jacques Charvet. In a response to IUGS President Robert Missotten agreed to be nominated, and the decision should now be taken by the IUGS EC.

More recently GEO has circulated a request for ensuring that GEO is visible at the UN Conference on Sustainable Development (Rio+20) in Rio de Janeiro on 20-22 June 2012, with the aim to raise the international profile of GEO and its ability to contribute to the Conference themes and outputs, and would help to position GEOSS as a leading provider of Earth observation data and information.

As recommended by IUGS Vice-President Jacques Charvet in his report on the GEO VIII meeting IUGS should be more involved in GEO, not only because it is a good place for acquiring or increasing visibility, but also in order to participate in some important actions. Thus the IUGS has made a nomination for the Data Sharing Working Group. Moreover IUGS should nominate a member for the Post-2015 Working Group, which could introduce more Earth Sciences in the panel of contributions. IUGS could also propose to have a representative in the Capacity Building Committee

8.e. IUGS-IUGG International Lithosphere Programme (ILP) – Rapporteur: Jacques Charvet – Received February 10, 2012.

The 2011 report came very late, on February 10, and was obviously prepared in a hurry, containing some mistakes.

ILP is an IUGS and IUGG initiative established by ICSU in 1980. It is a body of IUGG and IUGS, which are both represented in the bureau. ILP has an international Bureau with members from several countries that meet annually to monitor progress and to select new programmes and activities in close consultation with the representatives of National Committees. It comprises: 11 executive members, 6 associate members, and 3 lifetime members.

ILP stimulates and supports the Task Forces and Regional Coordinating Committees with 4,000 US \$ per year over a period of 5 years. This seed money is used by the project leaders to raise additional funds for their scientific activities.

The Bureau met in Vienna, on April 4th, attended by 28 scientists from 11 countries. A proposal for a new Task force on “Subaqueous Paleoseismology” was presented. The importance of a strengthening with other global initiatives, the linkage to other active bodies and entities, like IASPEI, IAVCEI etc. was outlined. There was also an informal Bureau meeting in Utrecht in November. The President attended the IUGG meeting in Melbourne.

Regarding the scientific activity, the new structure comprises 10 Task Forces and 4 Coordinating Committees.

3 Task Forces and the Coordinating Committee TOPO-EUROPE organized sessions at the EGU meeting; were also organized: 1 session at the Goldschmidt Conference, in Prague; 2 at the AGU Fall

meeting, 1 at the GV & GSA Meeting, Munich; a 5 day Workshop in the Alps (new Task Force IX), and the Penrose Conference “Past and present accretionary orogens” in Urumqi (CC TOPO-CENTRAL-ASIA).

A precise financial report is given.

In 2011, the income from voluntary contributions reached 53,000 US\$ and 11,000 €, 30,000 \$ from IUGS and IUGG, the rest from 11 different countries. New potential sponsors have been approached.

Converted into Euros, the income was: 47,932.73 EUR from new subventions, a total balance in the Euro Account: 72,163.88, a total balance in the Dollar Account: 2,065.65 US \$.

The total expenditure in the Euro Account was: 57,093.34 EUR; total expenditure in dollars: 0.00 US \$

The balance is: Dollar Account: 2,065.65 US, Euro Account: 39,309.27 EUR.

There is no precise financial request but implicitly the same amount as in 2011 is expected.

Due to the positive balance, ILP will probably be able to increase the Task Force support per 2012, in case no further Task forces will be selected.

The work plan for 2012 includes: IGCP Anniversary Paris 22 Feb. 2012, Publications in *EOS*, *Episodes* and in *Earth Science Reviews* in preparation, advertising for new support by national science foundations and industry, several sessions at EGU-meeting Vienna, 22 – 27 April 2012, ILP Bureau meeting and ILP-session at EGU in Vienna, IGC Brisbane August 2012.

It is an active and fruitful programme, reviewed in 2011.

No specific financial request, but implicitly they expect 15,000 €.

Comment – what is going on with Banking? This balance is a true balance -- there is no hidden agenda

8.f. Planet Earth Institute (Earth Science Matters) Rapporteur: Alberto Riccardi – E. de Mulder

A document was circulated to the EC members by the IUGS President on 28 December 2011. There it was summarized all facts related to the Planet Earth Institute since the matter was discussed at the 2010 EC meeting. It was also explained several changes produced since then including those related to the new name “Earth Science Matters Foundation”.

A report from Earth Science Matters Foundation, received on 24 January 2012, mentioned: 1) a meeting of the Board Earth Science Matters held in Munich on 4th September 2011 where the Board was enlarged to 4 persons and where the focal areas of work, i.e. Energy, Water, Hazards/disasters and Climate Change, were determined; 2) that the Foundation has the partnership of four organizations, i.e., IUGS, International Association for Mathematical Geosciences, the International Lithosphere Programme and World Soil Information; 3) that guidelines are now in existence for the establishment of National Committees; 4) that the projects in which the Foundation was embarked concerned the preparation, of the Board meeting held in Munich, and the Final Report of the International Year of Planet Earth, both of which were funded by a major grant from the Dutch Ministry of Economy; 5) that a new logo was established and a website became effective; 6) and that several presentations on the Foundation were given at different meetings.

The Earth Science Matters Foundation request the IUGS continues the contribution of 5,000 originally allocated to the Planet Earth Institute, and is also proposing a written Partnership agreement.

The Executive Committee discussed the possible relationship with the Earth Science Matters Foundation – as a continuation of the Planet Earth Institute, with which the IUGS has become a scientific partner in 2010. The Executive Committee decided to decline the proposal to be part of the Earth Science Matter Foundation, as it is considered that the activities the Foundation could develop to support IUGS are currently promoted and executed by the IUGS and its different bodies.

- **ACTION ITEM # 43.** President Alberto RICCARDI to inform the Bank of Angola regarding the official status of IUGS in respect to the terminated IYPE.

DeMulder gave brief presentation on new organization. Provided the IYPE final report to Alberto Riccardi. How will you interact with GEOPARKS? Would like to continue that and work to share the expertise with GEOPARKS group. Also have NC's which are now in development. Some projects have been funded, Secretariat is unfunded. The whole issue will be considered in a closed EC meeting on Friday.

8.g. Global Geoscience Initiative Rapporteur: Pat Leahy Report by Edmund Nicklaus

At the upcoming IGC meeting in August in Brisbane, Australia (August 5-12, 2012), we hope to hold a Town Hall style forum on developing solid-earth geosciences initiative as part of the Belmont forum. This follows on from a series of meetings that we have organised at EGU, AGU and GSA assemblies see the latest report at: <http://www.agiweb.org/members/ggi/GGIReport.pdf>

The bottom line and reason that we need this meeting, is that we hope to start tying together different national efforts in solid earth sciences programming and in infrastructure development to provide joint initiatives on a global scale.

The proposal for the IGC forum is to have a series of short presentations from key funders of earth sciences and to discuss how best to create a momentum for our science. This could be as part of the Belmont forum which is gaining support from a number of national funding agencies.

The attached page provides an outline of the event. We do realise that Brisbane is a long-way to come for a short meeting, but we would encourage you to attend the IGC as a place to discover some of the latest discoveries in the earth sciences with a strong focus on Oceania.

- **ACTION ITEM # 36.** President Alberto RICCARDI to inform Edmund NICKLESS that Councilor Sampat TANDON will represent IUGS EC at the Global Geoscience Initiative meeting to be held at the next IGC.

Sampat K. Tandon will be the IUGS representative at the meeting in Australia

9. INTERNATIONAL COUNCIL FOR SCIENCE (ICSU)

9.a. Relations with ICSU Rapporteur: Alberto Riccardi

During 2011 IUGS had an important interaction with ICSU on topics covering a broad spectrum of scientific and organizational topics.

Main activities were related to ICSU 30TH General Assembly (ICSU GA) and its preparation, which was attended by IUGS President, Secretary General and Treasurer. During ICSU GA, held in Rome on 26-30 September 2011, a number of important decisions were adopted that will influence the directions and conduct of international science in the coming years. Decisions endorsed by the IUGS Bureau were: a) establishment of an Earth System Sustainability Initiative (ESSI), and an Urban Health and Well-being, Initiative, adoption of the Principle of Universality of Science; b) to work with the global observing systems and GEOSS in relation to the Grand Challenges and Earth System Sustainability Initiative; c) commitment to ICSU being involved in the Rio+20 Conference and its follow-up to actively promote science education initiatives; d) to consolidate and expand the ICSU World Data System; e) approval of ICSU's Strategic Plan 2012-2017; f) election of new Officers of the ICSU Executive Board; g) approval of the outline budgets for 2013-2015; h) and approval of weighted voting on financial issues. A resolution for the Integrated Research and Disaster Risk (IRDR) Program, together with other existing relevant institutions, to start a negotiation to set up a process to assess and synthesize policy-relevant results to enhance the knowledge of disaster risk at global, regional and local levels and the awareness of the people living with risk was also approved. During the GA the IUGS President presented a short oral poster on IUGS activities.

Other actions take by IUGS in relation to ICSU were: 1) Nomination of J.-P. Cadet for the Committee on Scientific Planning and Review (CSPR); 2) Participation in the Sixth Electronic General Assembly on ICSU's accounts; 3) Joint nomination with the GeoUnions cluster of a candidate for ICSU Executive Board; 4) Distribution of ICSU's call for ICSU Grants Programme 2012 to IUGS Adhering and Affiliate members and IUGS bodies.

9.b ICSU Committees and IUGS Representation – Rapporteur: Peter Bobrowsky

Oral Report summarizing IUGS representation in ICSU. Representation of IUGS in ICSU is currently non-existent.

9.c ICSU Grant Programme Rapporteur: Alberto Riccardi

During 2011 the IUGS participated in two projects supported by ICSU's Grant Programme:

1) The project entitled "An international workshop to initiate the circumpolar integration of permafrost microbiological studies" (MicroPerm), which received a Grant for EUR 20,000, was submitted by IUGS in 2010 on behalf of the International Permafrost Association (IPA). Supporting applicants were the International Union of Geodesy and Geophysics (IUGG), the International Union for Quaternary Research (INQUA), the International Arctic Science Committee (IASC), and the Scientific Committee on Antarctic Research (SCAR), and the Alfred Wegener Institute for Polar and Marine Research (AWI). The main objectives of MicroPerm were: a) Organize a process leading to the establishment of a pan arctic study programme on permafrost microbiology; b) convene a kick-off workshop to gather the leaders in the field of permafrost microbiology and qualify the framework of the programme; c) seek additional endorsement and sponsorship through the supporting applicants to firmly embed the future program in global scientific and observing efforts. This project was to be terminated at the end of 2011, but thus far the IUGS has not received any report on the final results.

2) the project entitled "Extreme Natural Hazards and Societal Implications (ENHANS)", lead by the International Union of Geodesy and Geophysics (IUGG), in partnership with IUGS, the International Geographical Union (IGU), the International Society for Photogrammetry and Remote Sensing (ISPRS), the International Union of Theoretical and Applied Mechanics (IUTAM), the Integrated Research on Disaster Risk (IRDR), the American Geophysical Union (AGU) and the UNESCO bodies the Global Ocean Observing System (GOOS) and the Intergovernmental Oceanographic Commission (IOC), together with the ICSU Science Plan for Integrated Research on Disaster Risk (IRDR), and the ICSU Regional Offices for Asia & Pacific (ROAP), Latin America and the Caribbean (ROLAC). The principal goals of the ENHANS project were: To improve understanding of critical phenomena associated with extreme natural events and to analyze impacts of the natural hazards on sustainable development of society. For the end of 2011 the Project had reached its aims: it brought together international experts in various scientific, mathematical and engineering disciplines related to extreme natural hazards and disaster risk analysis as well as policy makers, insurance industry and media with the aim of scientific understanding, analysis, modeling and forecasting of extreme natural events, assessment of physical and social vulnerability and exposure, and delivering the relevant information to those who needs it to reduce (and if possible, to prevent) disasters caused by the extremes. The ENHANS Project held 7 scientific events in Iguassu (Brazil), Pretoria (South Africa), Antalya (Turkey), Melbourne (Australia), Trieste (Italy) and twice in San Francisco (USA). An ENHANS book proposal was accepted by Cambridge University Press.

During 2011 the project entitled "eGY Africa – better Internet connectivity for research and education institutions in Africa", lead by IUGG and supported by IUGS with the active participation of IUGS Commission for the Management and Application of Geoscience Information was awarded EUR 20,000 by ICSU. It is considered that IUGS CGI Commission will be well positioned to assist and collaborate in the project given a long standing history of cooperation with various countries in Africa. Similarly, the existing IUGS – UNESCO partnership and their interest in Africa will further enhance the output of the proposed project. The project was also supported by CODATA and ICSU ROA.

In 28 July 2011 IUGS circulated to its Adhering and Affiliate members and other IUGS bodies a call for

the ICSU Grants Programme 2012, but for the deadline (1 November 2011) no applications were received.

- **ACTION ITEM # 15.** Secretary General Peter BOBROWSKY to request to SGA the final report on ICSUs grant for Permafrost project.

9.d Relations with other ICSU Unions (GeoUnions) Rapporteur: Alberto Riccardi IUGS - GeoUnions

The 8 unions (IUGS, IUGG, IGU, IUSS, INQUA, ISPRS, IAU and URSI), which comprise the informal GeoUnions consortium within ICSU, try to interact and meet periodically to address scientific and geo-political issues which are shared by all of the Unions. Normally the President and/or Secretary General of each of the Unions attend the meeting to ensure the concerns of their respective bodies are represented effectively in the discussions.

During 2011 the IUGS participated in a one day meeting of the GeoUnions on September 25, just prior to the 30th General Assembly (GA) of the International Council for Science (ICSU) in Rome, Italy. At this meeting, where IUGS was represented by its President, Secretary General and Treasurer, several issues of mutual interest were considered. Topics of discussion included: a) current activities of each GeoUnion; b) IGU initiative on International Year of Global Understanding (YIGU); c) activities of the project "Extreme Natural Hazards and Societal Implications (ENHANS)", lead by the International Union of Geodesy and Geophysics (IUGG) and supported by several GeoUnions (including IUGS); d) the termination of the IYPE; e) the rules of nomination for ICSU's Executive Board, nominations for ICSU officers and executive Board members at the coming GA; f) the program of the ICSU's Union Members Forum to be held on 27 September in relation to issues relevant to the GeoUnions to be considered in ICSU's GA. The GeoUnions agreed on: a) that IGU should immediately contact all of the GeoUnions regarding their official endorsement of the proposed YIGU; b) to compile a short sentence to be read on behalf of the GeoUnions at the GA regarding the of substantive union issues in the agenda of the Union Forum; c) to ask ICSU how it is expected the GeoUnions to contribute to the Earth System Sustainability Initiative; d) to request information to see if there is a way the GeoUnions can contribute to Rio+20; e) to request information to ICSU on what are they actually doing in education; f) to propose an intergovernmental assessment panel on disaster risk.

The next meeting of the GeoUnions was scheduled for spring of 2013 in Paris. But a GeoUnions meeting will take place in Istanbul on 28-29 April 2012. IUGS Treasurer, William Cavazza will represent the Union at the Meeting.

IUGS - IGU

The International Year of Global Understanding (YIGU), an initiative of the International Geographical Union (IGU) was endorsed by decision of the IUGS EC on beginning of December 2011. The YIGU aims to yield deep, but actionable insights into the ways all peoples can live together more sustainable. The focus will be on developing strategies for targeted local projects with global reach. Three elements will be included: research, education, and information. Research will bring social and natural scientists together to understand the global impacts of everyday local activities. Teaching will use research results in classrooms worldwide, at all levels. The YIGU will provide information to increase public awareness using, for example, publications, computer games, and TV programmes.

IUGS - IUGG

On 27 June and 2 July 2011 IUGS was present at the International Union of Geodesy and Geophysics (IUGG) Council Meeting in Melbourne, Australia. IUGS Councilor Colin Simpson kindly accepted to represent IUGS President at the meeting. During the meeting was elected the new IUGG Bureau, and Harsh Gupta became the new President. Issues of interest noted by Councilor Colin Simpson during the meeting were: a) Water: the International Association of Hydrological Sciences (IAHS) - a member of IUGG - has a close collaboration with the International Association of Hydrogeologists (IAH) - an IUGS affiliate member -, and both organizations held a joint conference in 2009. IAHS is closely involved with the UNESCO International Hydrological Programme; b) Climate: a member of IUGG, the International

Association of Meteorology and Atmospheric Sciences (IAMAS) proposed to establish a new IUGG Commission on Climate Change (UCCC) that would address a variety of issues including impacts of climate change, such as increased natural hazards, and recommendations for preparing for the climate change impacts, etc.; c) Oceans: a member of IUGG, the International Association for the Physical Sciences of the Oceans (IAPSO) is primarily involved with the interactions taking place at the sea floor, coastal and atmospheric boundaries, and it does have some involvement with (superficial) geology of the deep ocean floors; d) Geodata: there was much discussion in the sessions about Geodata and ICSU, and the report of the new IUGG Commission on Data and Information (UCDI) commented favorably on the collaboration being developed with IUGS/CGI).

Following acceptance by IUGG in 2010 an IGCC proposal a joint Working Group was established to evaluate possible actions with regard to possible long- term coordination of IGS and IUGG General Assemblies, with the main objective of reducing scheduling and venue conflicts. The proposal originated in two requests received from the IUGS German National Committee on 17 November 2009 and from the EuroGeoSurveys on 19 April 2010. A TOR was established and the IGCC was represented in the Working Group by E. Abbate (Co-Chair) and P. Bobrowsky, with A. Solheim as alternate. Thus far no report has been received on the activities of the Working Group.

During 2011 a project entitled "Extreme Natural Hazards and Societal Implications (ENHANS)", lead by the International Union of Geodesy and Geophysics (IUGG) and supported by IUGS, received an ICSU grant.

IUGS - IUPAC

The IUGS-IUPAC Task Group on Isotopic Geology continued its work and a paper on "IUPAC-IUGS common definition and convention on the use of the year as a derived unit of time" was published in "Pure and Applied Chemistry" (83, 5) and "Episodes" (34, 1), with the endorsement of both organizations. IUPAC took a similar stance than IUGS to disregard some critical comments originated in some individual geologists without clear international representation. IUGS however included a summary of those critics in the December 2011 issue of Episodes, and two comments on them were also published in the same issue, one by the members of the Task Group on technical aspects and one by the IUGS President, on behalf of the IUGS EC, on procedural matters.

- **ACTION ITEM # 13.** President Alberto RICCARDI to invite the Executive Director of ICSU (Steven WILSON) and the ICSU Geo-Cluster Executive Board member (Orhan ALTAN) to attend the 34th IGC in Brisbane.
- **ACTION ITEM # 14.** President Alberto RICCARDI to develop an IUGS position statement for Rio +20.

10. PUBLICATIONS, ETC.

10.a *Episodes* Rapporteur: M. Jayananda)

Episodes – 2011, IUGS Journal Episodes

OVERALL OBJECTIVES

Episodes is the official quarterly journal of the International Union of Geological Sciences (IUGS). It covers developments in wide range of topics in Earth sciences which are of regional and global importance.

Apart from themes of classical geology, special emphasis is given to topics involving application of geological knowledge to address major global issues of climate change, water, food and energy security, geological hazards, land use planning, urban development, waste disposal, geological education/training/outreach programs in the developing countries. As an official communication media of IUGS, *Episodes* also invites reports on scientific activities of IGCP projects /conferences/book reviews

etc.

Serves the IUGS as the Official communication media of IUGS

ORGANIZATION LEADERSHIP

Prof. M.Jayananda – Editor
Mr B.R.Krishna – Managing Editor
Mr R.H.Sawkar – Treasurer

Receives support from the Geological Society of India

CHIEF ACCOMPLISHMENTS IN 2011

The journal impact factor consistently maintained the journal impact factor above 2 (2010 impact factor is 2.041).

MAIN PRODUCTS IN 2011:

All the four issues of volume 34 have been published and distributed.

MAIN PROBLEMS ENCOUNTERED IN 2011:

No major problem encountered except minor problem with web page server domain which has been fixed.

SUMMARY OF EXPENDITURES IN 2011

Details of expenditure (in Indian Rupees) for the four issues are given below (1US\$ = 52 Indian Rupees):

Printing and paper	692,002
Postage	680,515
Salaries	387,000
Miscellaneous	95,000
Overhead (20%)	400,000
Total	2,254,517

We have collected approximately a total of **Rs. 1,81,2800**, the details are given below.

IUGS Grant for publication

We received US\$ 28,000 from IUGS towards publication and distribution of *Episodes* for the year 2011.

Individual Subscribers

A marginal decrease in individual subscription was noticed. A total of 350 individual subscription was collected amounting to \$10500. Russian Academy of Sciences (RAS) has continued their subscription to 57 copies.

Colour Reproduction and Reprint Charges

We have been charging a nominal rate for colour reproduction charges and US\$ 4 to 5 for a reprint. So far we have collected US\$2700 in this regard.

A total of US\$ 41,200 has been collected which approximates to **Rs.1,81,2800**

Subscription for 2012

We have already started receiving renewal request for the year 2012 and payment of US\$2000 has already been received.

WORK PLAN FOR NEXT YEAR

A special issue of Episodes planned during March 2012 on the Geological framework of Australia and Oceania as a mark of tribute host country Australia.

Planned participation in the next IGC – We planning to participate in 34th IGC and open a stall for Episodes

ANTICIPATED RESULTS TO BE ACHIEVED FOR NEXT YEAR

A special issue with 250 pages focusing on the Geological framework and mineral resources of Australia and Oceania will be published during March 2012. We are also planning participate in 34th IGC at Brisbane and open a stall for Episodes mainly to showcase the publication activity of Episodes and to impress global scientific community to contribute results of high quality research to Episodes.

Potential 2012 Funding Sources: IUGS support grant for Episodes

REVIEW CHIEF ACCOMPLISHMENTS OVER LAST FIVE YEARS (2007-2011)

The Journal published high quality contributions covering wide range of topic in Earth Sciences that address global and regional issues. The Journal impact factor has improved significantly from 1.8 to 2.16.

OBJECTIVES AND WORK PLAN FOR NEXT 5 YEARS (2012-2017)

Our main objective is to further improve the quality of the Journal. We are also aiming encourage scientific community from Africa and other developing countries to publish their results in Episodes.

SUGGESTIONS FOR IMPROVEMENT OF IUGS ACTIVITIES, ESPECIALLY IN REFERENCE TO ACTIVITIES OF IUGS BODIES

Reorganization of Editorial Board is essential to maintain the high standards of Journal Episodes and also to reach further heights in coming years. For several years Editorial Board has not been changed. In this context we request IUGS Executive Committee to approve the list of the proposed Associate Editors. We also recommend UNESCO-IGCP, SIDA-IGCP project leaders to publish their results and reports in Episodes.

- **ACTION ITEM # 16.** *Episodes* Editor JAYANANDA should regularly advertise in Episodes that past issues of the journal are available to be read for free on the IUGS website.
- **ACTION ITEM # 17.** *Episodes* Editor JAYANANDA to change Logo and cover in Episodes to format previous to IUGS 50th anniversary.
- **ACTION ITEM # 18.** President Alberto RICCARDI to inform the Geological Society of India that last issue of Episodes may be made available in Episodes website as soon as it is published.
- **ACTION ITEM # 47.** Past President ZHANG Hongren to propose additional members from China for Episodes Editorial Board.
- **ACTION ITEM # 48.** President Alberto RICCARDI to inform the PC and Episodes Editor, after reception and approval of new proposals by Past President ZHANG Hongren, that the IUGS EC approved all (but one) proposals for *Episodes* Editorial Board.

10.b Special Publications: Agreement with GSL Rapporteur: Fred Spilhaus

On 27 February 2012, Peter Bobrowsky, representing the IUGS, signed a letter of agreement for GSL to

publish "Gold-Transporting Hydrothermal Fluids in the Earth's Crust" under the general terms of the MOU signed by the two organizations on 8 April 2003.

10.c E-Bulletin Rapporteur: Colin Simpson

Publication and sitribution of the monthly E-Bulletin is proceeding smoothly.

10.d Website Rapporteur: Peter Bobrowsky

In 2009, during the 60th Executive Committee meeting of IUGS in Sydney, Australia the decision was made to redesign the existing Union website. This was accomplished by hiring a Canadian software designer Fleiva Media.

In early 2010 the new website was launched and website analytics were started on 11 February 2010. During the 61st Executive Committee meeting of IUGS in Paris, France the decision was made to have the Secretary General of the Union manage the daily administration and up keep of the site. In February 2011 during the 62nd Executive Committee meeting the first analysis of results using Google Analytics provided firm statistics on the use and success of the new web site. Since the official launch modification, additions, corrections and other tasks related to Union activities (new people, commissions, activities, links, affiliates, etc.) have been duly processed by the Secretary General.

Total expenditures in 2011 for outside website programming were on the order of < \$2,000 USD.

Statistical analysis for the 12 month period 1 February 2010 to 31 January 2012 of the new site indicates the following details:

- 32,880 site visits which is an increase of more than 10% over the last year
- 25,231 visitors is an increase of more than 10% over last yea
- 81,664 page views
- 2.48 average pageviews (slightly down)
- 81 average hits per day (same)
- Top 3 country users: USA, Brazil and Italy (same as last year)
- 74.91% are new visitors!
- Top 3 popular contents: homepage, directory and publications (instead of calendar for the last)

The EC thanked the Secretary General for his continued excellent administration of the IUGS website.

11. IUGS 50th ANNIVERSARY

11.a Essay Contest Rapporteur: Wesley Hill

In celebration of the IUGS 50th Anniversary throughout 2011, the IUGS Executive Committee hosted a goal essay contest for early career geoscientists under the age of 35 years of age to express their views on the future of the geological sciences. IUGS is now honoring the best four essays submitted by young scientists by highlighting in *Episodes* their opinions on t *The Future of the Geological Sciences*. The winning author, Gemma Venhuizen from the Netherlands, will be provided with a travel grant to attend the International Geological Congress (IGC) in Brisbane, Australia in August 2012 to present her paper and receive an IUGS medal for her creative and inspiring article CoCoA: *the Future Ingredient for Geoscientific Research* which focuses on the future of geosciences research. Other honored articles were submitted by Anne Carter Witt from the United States of America, Tim Stahl form New Zealand, and Nathan Barber from the United States of America.

The early career global essay contest was launched in January 2011 through the YES Network and other IUGS partners and affiliate organizations. Twenty nine (29) essays were submitted for the contest from 20 countries. The IUGS President formed a judging panel and essays were judged on the criteria of: content relative to the theme (future of the geological sciences), original idea, science and overall score. Essay contest partners are IUGS, IGC, and the YES Network. The IUGS Executive committee congratulates the winning author as well as the additional three honored essay authors, and encourages early career scientists to continue to submit their research and opinions to *Episodes for future publication*.

11.b DVD Rapporteur: Wesley Hill

IUGS video received many awards and will be modified to be disbursed at the upcoming IGC in Brisbane.

11.c Episodes, etc.

11.d IUGS Book of Facts Rapporteur: Alberto Riccardi

Alberto Riccardi is working with Anne Diehls to consolidate book of facts to include past IGC docs, presidents etc., this is to be completed by April 2011 The new video , the book of facts, and the annual report will be included on the memory stick for distribution.

12. IUGS POLICY AND STRATEGY MATTERS

12.a IUGS/IGC Statutes and Byelaws Rapporteur: Pat Leahy

(Hand-outs provided) – . Review of the changes was discussed at length.

It is stressed the need of a clear distinction between IUGS and IGCC. The Statute committee will review the IUGS-EC and the IGCC. The ultimate authority for IUGS is the Council. The duty of the IUGS-EC is to submit to the Council and send the Statutes along with opinion. The Statutes Committee will improve the draft document and submit to Council. A motion to approve in principle the draft statutes submitted by the Statutes Committee. It was approved by majority vote.

- **ACTION ITEM # 22.** The Statutes and Bylaws committee needs to evaluate and propose which of the Statutes and Bylaws should be tabled first at the IGC Council meeting.
- **ACTION ITEM # 23.** IUGS EC should examine and send comments to the Statutes and Bylaws committee upon the most recent version of the IUGS Statutes and Bylaws as soon as possible so that a single version is ready by the 1st of April.
- **ACTION ITEM # 62.** President Alberto RICCARDI to inform the Statutes and Bylaws Committee that the IUGS EC approves in principle the draft version of the IUGS Statutes and Bylaws with the expectation that suggested changes will be integrated.

12.b IUGS Strategic Plan and Priorities of IUGS Rapporteur: Attilio Boriani

The Strategic Plan was initially approved in 2000 containing both strengths and weaknesses.

Comments on the Strategic Plan:

- Arnie – The SPC needs an external review by younger scientists one half of whom are females who are provided time to review with new eyes. With geophysics there is no clear solid earth geophysics and no distinction between the geophysicist and the geologists anymore. The committee assembles each year and we need grass roots of the organization at on year intervals.
- Ed DeMulder – Visibility of the IUGS importance and societal relevance was documentd in the large document
- Stan Finney – need to be able to see from the lower level – need to implement

regcommendations through the entire IUGS organization (IUGS website). Results, recommendations and standards throughout the ORG's. Take care of under represented countries through the Task Groups to work their way up through the organization. Funds will be needed.

- Aberra suggested that the document be circulated for comment. . IUGS needs comments from all organizations to show they are truly a part of the organization and what IUGS can do. IUGS is equal to UNESCO.
- Lio thanked the committee members for their work. Regarding geophysicists – the IUGG Physicists deal with solid Earth and the IUGG is a completely different organization from the IUGS.
- DeMulder there is no way to merge IUGG/IUGS the way to go is to seek close cooperation.
- Alberto Riccardi – Noted the document is good, general in nature similar to previous Strategic Plan of 2000. The comments and direction were practical in 2000 and were written and approved and then forgotten. The levels of communication were added, however the Strategic Plan was not known. The Strategic Plan needs to be distributed to all levels of the IUGS. The technical aspects mentioned in the Strategic Plan to be given to the EC for implementation and carried forward. .

12.c Task Groups (TG) and other assignments

12.c.1 TG on Adhering Organizations Rapporteur: Jacques Charvet

Exchanges of e-mails were made between the members of the Task Group on Adhering Members with several National committees, and with the secretary General in order to implement the heading "National committee Highlights" on the IUGS website and to update the information on the NC's.

All the websites of National Committees were checked and a corrected spreadsheet of the contacts prepared.

The Group worked on a synthetic spreadsheet of NC's with information on their composition, number of meetings etc., in and established a draft of an operational model for Adhering Members.

- **ACTION ITEM # 27.** Vice President Jacques CHARVET to send primary contact details for each Adhering Organization to Secretary General Peter BOBROWSKY to include them on the website.

12.c.2. TG on Affiliate Organizations Rapporteur: Ochir Gerel

- Task Group developed New Reporting Form. Messages were sent to AO asking for brief report.
- After EC Meeting in Paris I checked websites of 22 Affiliated Organizations (AO) that not reported in 2010, and try to analyze the reasons why the reports were not submitted. Some of affiliated organizations (5) were not very active in 2010, or activity done in cooperation with other affiliated organizations of similar research areas. Some of AO were active, but not reported, and reason is not clear.
- Got answers to Questionnaires from additional 6 Affiliated Organizations, and analyzed them.
- Checked websites of 54 Affiliated Organizations. From 54 Affiliated organizations only 13 have links and logo, and 12 links to IUGS. All Affiliates have websites, updated and informative, and have cooperation with many associations of similar research interest. Only Arab Geologists Association (AGA) website is not updated. IUGS website established very good links with 52 AO, only AGA is linked to e-mail address, not to website, and link with AAWG from IUGS Directory is not working, but AAWG has good updated website.
- Suggestion: Relation between IUGS and AO improved, but still in the 19 AO links to IUGS is not shown, if some of them have interaction with IUGS.

12.c.3. Inactive Countries Rapporteur: Sampat K. Tandon

The list of inactive countries are as follows: Algeria, Angola, Belanus, Belize, Bolivia, Burkina Faso, Burundi, Congo, Ecuador, Georgia, Ghana, Guatemala, Indonesia, Iran Jamaica, Latvia, Lebanon, Lesotho, Madagascar, Nicaragua, Niger, Pakistan, Panama, Papua New Guinea, Paraguay, Phillipines, Senegal, Somalia, Suriname, Swaziland, Tunisia, Ukraine,Uraqway, Venezuela, and Zambia.

12.d. Relations with UNESCO Regional Offices

12.d.1 RO on Arabian countries and sub-Saharan Africa Rapporteur: Ezzoura Errami

Ezzoura reported on the coordination with two regional UNESCO Offices

- Cairo – there is a new Arabic report on Geopark. There are many activities carried out by UNESCO in the reio. Ezzoura thinks that IUGS should propose some joint activities.

Jesus Frias reported that COGE also participated in the GEOparks conferences and COGE proposed an initiative with UNESCO. COGE encourages such cooperations – there were three proposals/initiatives all complemented.

Aberra – Reported he would not be in Paris however he feels that UNESCO is not doing a comprehensive job (e.g., with GSAf) across Africa but only in isolated cases.

12.d.2 RO on Asia and the Pacific Rapporteur: Ochir Gerel

There is no report

12.d.3 RO on Latin America and the Carribbean Rapporteur: Alberto Riccardi

The main activity of UNESCO Regional Bureau for Science in Latin America, and the Caribbean of interest to IUGS was a Conference on "Geoparks: an alternative for local development" which took place on 13 - 15 November in the city of Trinidad, Flores, Uruguay. It was organized by the UNESCO Regional Office and the Municipality of Flores (Uruguay), with the financial support of the IUGS.

The Conference had the participation of outstanding foreign scientists in the field, and its aim at was to advance the development of Geoparks in Latin America and achieving agreements toward the creation of a Latin American Geoparks Networks. It also featured national cases currently underway in Argentina, Brazil, Chile, Ecuador, Peru, Venezuela and Uruguay, among others. The event featured stakeholders from the academia, the State, and the private sector, in Latin America and the Caribbean, who are directly involved in the preservation and dissemination of the importance of geological heritage through local sustainable economic development, including geo-tourism.

12.e. Relations with ICSU Regional Offices

12.e.1 RO on Africa Rapporteur: Ezzoura Errami

There is no contact. Aberra Mogessie informed all that the GSAf has good contact with the RO.

- **ACTION ITEM # 24.** President Albert RICCARDI will contact the head of the ICSU RO of Africa to see ways to improve relationships between IUGS and the RO.

12.e.2. RO Asia and the Pacific Rapporteur: Ochir Gerel

- On July 9, 2011, I had a meeting with director of this ICSU Regional Office for Asia and the Pacific Dr. Mohd Hasan Nordin in Ulaanbaatar. I informed Prof. Hasan Nordin about IUGS activity.

- We discussed possible areas to promote linkage between ICSU RO and IUGS bodies: Commission, Task Groups.
- Prof. Nordin Hasan introduced me with new initiatives and RO recent projects: like a program on Integrated Research on Disaster Risk (IRDR). After meeting we exchange e-mails, and our views on our cooperation. I received information about new initiatives of ICSU RO. Prof. Nordin Hasan concluded that the relationship between IUGS and ICSU have improved, and now the condition is favorable for a closer and more fruitful cooperation.
- I regularly check website of ICSU ROAP to be informed about RO activity.
- **ACTION ITEM # 25.** OCHIR Gerel to obtain more precise information as to what is taking place in the ICSU RO for Asia.

12.e.3. RO on Latin America and the Caribbean Rapporteur: Alberto Riccardi

A major achievement of ICSU ROLAC during 2011 was completion and beginning of implementation of the four science plans for the four priority areas: biodiversity, natural hazards and disasters, sustainable energy, and mathematics education, which were originally presented in 2009 and published in 2010. Several meetings were held on the different priority areas. The “Extreme Natural Hazards and Societal Implications” (ENHANS) project, lead by the IUGG and supported by IUGS, held two symposia, one on “International Collaboration in Earth and Space Sciences”, and one on “Natural Hazards and Disaster Risk in Latin America and the Caribbean”. On the area of natural hazards and disasters ICSU ROLAC is also looking for potential collaboration with ICSU’s Initiative on “Integrated Research on Disaster Risk” (IRDR).

An ICSU-UNESCO Rio+20 Regional Science and Technology Workshop for Latin American and the Caribbean was held on 3-5 August 2011 in Mexico City. It was attended by c. 60 scientists representing 20 countries who debated on the future of sustainable development in Latin America and the Caribbean. The recommendations of the workshop were presented to the Regional Preparatory meeting for the area in Santiago de Chile on 7-10 September 2011.

On 1 March 2011 ICSU ROLAC was relocated in Mexico City, under the sponsorship of the Mexican Academy of Sciences. Detailed information on the scientific priorities for the region and on the United Nations Conference on Sustainable Development (Rio+20) to be held in Rio de Janeiro, Brazil, on 4-6 June 2012 are to be found in ICSU ROLAC new website at the following address:
<http://www.icsu.org/latin-america-caribbean>.

Up to the present 14 Scientific Union Members of ICSU, including IUGS have appointed a contact person for the region. However, information provided by the new ICSU ROLAC is not fluid enough.

13. REQUESTS FOR FUNDING AND BUDGET FOR 2012

14. UPDATE

14a. Annual Reports 2009 and 2010 and 2011

The status of the Annual Reports was discussed.

- **ACTION ITEM # 31.** Secretariat to send the 2009 Annual Report to the Secretary General Peter BOBROWSKY by 16 March for uploading to the web.
- **ACTION ITEM # 32.** President Alberto RICCARDI to contact David HUNTLEY requesting the final version of the 2010 Annual Report.
- **ACTION ITEM # 33.** Secretary General to upload the 2010 Annual Report to the website once the document is finalized.
- **ACTION ITEM # 34.** EC and Secretariat to send information for the 2011 Annual Report to David

HUNTLEY, to be completed by June.

- **ACTION ITEM # 35.** Secretary General Peter BOBROWSKY to send final text of 2011 Annual Report to the PC for review.
- **ACTION ITEM # 59.** Secretariat to arrange printing of the Annual Report for distribution in Brisbane.
- **ACTION ITEM # 60.** Councillors Colin SIMPSON and TANDON Sampat to check on printing costs in Australia and India, respectively, to publish the 2011 Annual Report (100 copies).
- **ACTION ITEM # 61.** Councillors Colin SIMPSON and Councillor TANDON Sampat to check on printing costs in Australia and India, respectively, to publish the IYPE final report (200 copies).

14.b. IUGS Brochures and Flyers – Numbers to be provided by the Secretariat.

Name	Brochure	Flyers	Art Card	Compass	Golf Shirt	Medals	Mousepad	Silk Scarf	Ties	Video DVD	Video Stick
Bobrowsky	100	200	200	40	100			5	0		40
Cavazza	100	100	c. 50	0	5			5	5		20
Charvet	50	0	10	0	1				1		
Errami											
Gerel	35	0	45								
Hill	50		100		5				5		
Riccardi	253	309	470	80	0	24	0	28	25*	0	15
Simpson			66	4							
Tandon			50						12		
Zhang				30				10	30		
Secretariat	900	6,000	1,000	0	0	3	0	25	185	10	10
	1,488	6609	1941	154	111	27	0	(25th) 20	238	10	85
* 15 yellow and 10 blue											

14.c. IUGS Exhibition Stand – Covered in Wesley Hill's report.

14.d. IUGS Exposure and Advertising Products – Covered in Wesley Hill's report.

- **ACTION ITEM # 38.** Past President ZHANG Hongren to confirm the price of producing new IUGS scarves.

14.e. Directory – was submitted to Mudlappa Jayananda by the Secretariat.

15. VENUE AND DATE OF THE 64th EXECUTIVE COMMITTEE MEETINGS

This was discussed and decided that this decision should be made in Brisbane by the newly elected EC members.

16. OTHER BUSINESS

17. FREE DISCUSSION

Awards Ceremony at the 34th IGC

- Need to determine when – Opening or Closing session?
- IUGS Science Award of Excellence
- IUGS Best Paper Award
- Harrison Outstanding Achievement Award
- Russian Academy of Sciences Award

William Cavazza suggested have an Outstanding in all Scientific Fields of Geology Award. Proposed that IUGS have one that covers all areas. Need a name for this award which is open for discussion and submit proposed names within two weeks.

- **ACTION ITEM # 49.** Treasurer William Cavazza to circulate to EC his proposal of TOR for a new IUGS award.
- **ACTION ITEM # 50.** IUGS EC members to submit within March 2012 their suggestions for an individual's name for a new IUGS award.
- **ACTION ITEM # 64.** *Episodes* Editor to include in *Episodes* citation and response on IUGS awards to be presented at the 34th IGC (Brisbane, August 2012).

IYPE – Planet Earth Institute – Earth Matter Foundation

Long discussion with comments on the PEI, ESM, IYPE and related issues, especially on the IYPE final Report.

- **ACTION ITEM # 52.** President Alberto RICCARDI to inform Past Chair and Executive Director of IYPE that the copyright of the IYPE final report belongs to IUGS and UNESCO.
- **ACTION ITEM # 53.** President Alberto RICCARDI to inform ESM Chair Wolfgang EDER to remove all reference to and logos of ESM from the master copy the IYPE final report.
- **ACTION ITEM # 54.** President Alberto RICCARDI to request the Past Chair and Executive Director of IYPE to transfer the digital copy of the final report of IYPE to IUGS and UNESCO.

Publications Committee

The activities of the PC were discussed.

- **ACTION ITEM # 56.** A Task Group (Councillors TANDON Sampat, Zohra ERRAMI and Treasurer William CAVAZZA) will examine the issues with the PC and provide to the EC a list of candidates for new Chair and members to the EC before Brisbane.
- **ACTION ITEM # 65.** Secretariat to circulate to the EC a draft of the minutes of the 2012 EC meeting before the end of June 2012.
- **ACTION ITEM # 66.** President Alberto RICCARDI to thank the Spanish National Committee and the authorities of the city of San Sebastian for the excellent organization and facilities provided for the 2012 IUGS EC meeting.

The President closed the meeting thanking the EC members and all participants for their contributions.

18. REVIEW OF ACTION ITEMS FOR 2012 EXECUTIVE COMMITTEE MEETING OF THE IUGS:

IUGS ACTION ITEMS 2012

- **ACTION ITEM # 1.** IUGS President Alberto RICCARDI to write to the Government of China (MLR) in March/April regarding the potential transfer of the Secretariat to China if the IUGS EC has not yet received any communiqués from them in the near future. Completed
- **ACTION ITEM # 2.** The Secretariat should assess, clarify and quantify what historical IUGS information has already been digitized by Anne DEHLS and what still needs to be digitized.

Completed

- **ACTION ITEM # 3.** PC Chair Fred SPILHAUS to send an update status list of the IUGS related publication copyright for the past four years. - Pending
- **ACTION ITEM # 4.** PC Chair Fred SPILHAUS and PC committee should provide a written report to the EC within the next two months detailing a strategy for rotation of *Episodes* Associate Editor appointments/transition, paper review process, etc. – Pending
- **ACTION ITEM # 5.** PC Chair Fred SPILHAUS to provide a proposal on the best way to improve the English language for papers published in *Episodes* in parallel with their refereeing. – Pending
- **ACTION ITEM # 6.** EC to send comments on the Finance Committee report to Chair Antonio BRAMBATI within next March so this can be integrated into a final report which is required in time for the 34th IGC. Completed
- **ACTION ITEM # 7.** Finance Committee Chair Antonio BRAMBATI to produce a final document on IUGS financial matters for next April to be considered at the next Council meeting in August 2012. Completed
- **ACTION ITEM # 8.** Finance Committee Chair Antonio BRAMBATI to coordinate with IUGS Treasurer William CAVAZZA an audit report of the IUGS quadrennial budget to be considered at the next Council meeting in August 2012. Completed
- **ACTION ITEM # 9.** President Albert RICCARDI to inform INHIGEO that their revised Terms of Reference have been approved by the EC. Completed
- **ACTION ITEM # 10.** Councillor Wesley HILL to inform the Task Group on GeoHeritage that an effective website must be online, active and populated before the Brisbane congress.
- **ACTION ITEM # 11.** Councillor Colin SIMPSON to write/coordinate an article on GeoParks for the next *Episodes* issue.- Pending
- **ACTION ITEM # 12.** President Albert RICCARDI to inform the Heritage Stone Task Group that their Terms of Reference have been approved by the EC. Completed
- **ACTION ITEM # 13.** President Alberto RICCARDI to invite the Executive Director of ICSU (Steven WILSON) and the ICSU Geo-Cluster Executive Board member (Orhan ALTAN) to attend the 34th IGC in Brisbane. Completed
- **ACTION ITEM # 14.** President Alberto RICCARDI to develop an IUGS position statement for Rio +20. Completed
- **ACTION ITEM # 15.** Secretary General Peter BOBROWSKY to request to SGA the final report on ICSUs grant for Permafrost project. Completed
- **ACTION ITEM # 16.** *Episodes* Editor JAYANANDA should regularly advertise in *Episodes* that past issues of the journal are available to be read for free on the IUGS website. - Pending
- **ACTION ITEM # 17.** *Episodes* Editor JAYANANDA to change Logo and cover in *Episodes* to format previous to IUGS 50th anniversary. Completed
- **ACTION ITEM # 18.** President Alberto RICCARDI to inform the Geological Society of India that last issue of *Episodes* may be made available in *Episodes* website as soon as it is published. Completed
- **ACTION ITEM # 19.** Secretary General Peter BOBROWSKY to send the contact details for North Korea to all of the EC members. Completed
- **ACTION ITEM # 20.** *Episodes* Editor JAYANANDA to include a short notice in the next issue of *Episodes* inviting geoscientists around the world to send geology articles (PDF) and books to North Korea.- Pending
- **ACTION ITEM # 21.** *Episodes* Editor to include information on DPRK in a next issue of *Episodes*. Pending
- **ACTION ITEM # 22.** The Statutes and Bylaws committee needs to evaluate and propose which of the Statutes and Bylaws should be tabled first at the IGC Council meeting. - Pending
- **ACTION ITEM # 23.** IUGS EC should examine and send comments to the Statutes and Bylaws committee upon the most recent version of the IUGS Statutes and Bylaws as soon as possible so that a single version is ready by the 1st of April. - Pending
- **ACTION ITEM # 24.** President Albert RICCARDI will contact the head of the ICSU RO of Africa to see ways to improve relationships between IUGS and the RO. Completed
- **ACTION ITEM # 25.** OCHIR Gerel to obtain more precise information as to what is taking place in

- the ICSU RO for Asia. Completed
- **ACTION ITEM # 26.** President Alberto RICCARDI to respond in writing to all of the Adhering Organization regarding the individual the annual reports Completed
 - **ACTION ITEM # 27.** Vice President Jacques CHARVET to send primary contact details for each Adhering Organization to Secretary General Peter BOBROWSKY to include the on the website. Completed
 - **ACTION ITEM # 28.** President Alberto RICCARDI to respond in writing to all of the Affiliate members regarding the individual the annual reports and send them the new guidelines for compliance to the IUGS Affiliated Organizations. Completed
 - **ACTION ITEM # 29.** EC to take into account the proposal of the Azerbaijan NC to consider geological priorities of National Committees in solving global problems in Earth sciences. Completed
 - **ACTION ITEM # 30.** Publications Committee evaluate the proposal of the Azerbaijan NC to include in *Episodes* a section on nanotechnological research in different branches of geological disciplines. Completed
 - **ACTION ITEM # 31.** Secretariat to send the 2009 Annual Report to the Secretary General Peter BOBROWSKY by 16 March for uploading to the web. Completed
 - **ACTION ITEM # 32.** President Alberto RICCARDI to contact David HUNTLEY requesting the final version of the 2010 Annual Report. Completed
 - **ACTION ITEM # 33.** Secretary General to upload the 2010 Annual Report to the website once the document is finalized. Completed
 - **ACTION ITEM # 34.** EC and Secretariat to send information for the 2011 Annual Report to David HUNTLEY, to be completed by June. Completed
 - **ACTION ITEM # 35.** Secretary General Peter BOBROWSKY to send final text of 2011 Annual Report to the PC for review. Completed
 - **ACTION ITEM # 36.** President Alberto RICCARDI to inform Edmund NICKLESS that Councilor Sampat TANDON will represent IUGS EC at the Global Geoscience Initiative meeting to be held at the next IGC. Completed
 - **ACTION ITEM # 37.** President Alberto RICCARDI to inform YES President that the IUGS speaker for the YES session on 8th August 2012 at the IGC will be Councilor Ezzoura ERRAMI (alternate: Councilor Wesley HILL).
 - **ACTION ITEM # 38.** Past President ZHANG Hongren to confirm the price of producing new IUGS scarves. Completed
 - **ACTION ITEM # 39.** ARC of IGCP and GARS is required in the next few months (Chair William CAVAZZA and Secretary Jacques CHARVET).- Pending
 - **ACTION ITEM # 40.** ARC of TGGGB is required in the next few months (Chair TANDON Sampat and Secretary Peter BOBROWSKY). Completed
 - **ACTION ITEM # 41.** President Alberto RICCARDI to inform COGE ratification of COGE Vice-Chair. Completed
 - **ACTION ITEM # 42.** President Alberto RICCARDI to inform IGC LOC South Africa that the revised version of the MOU was approved by IUGS EC and will be signed upon approval of some minor additions. Completed
 - **ACTION ITEM # 43.** President Alberto RICCARDI to inform the Bank of Angola regarding the official status of IUGS in respect to the terminated IYPE. Completed
 - **ACTION ITEM # 44.** Secretariat to proceed with the IUGS reception details in Brisbane. Completed
 - **ACTION ITEM # 45.** Secretary General Peter BOBROWSKY to send a copy of the IUGS 2008 Secretary General Report for 2004-2008 to the EC. Completed
 - **ACTION ITEM # 46.** EC members should send their respective contributions to the IUGS 2012 Secretary General Report for 2008-2012 to Peter BOBROWSKY as soon as possible. Completed
 - **ACTION ITEM # 47.** Past President ZHANG Hongren to propose additional members from China for *Episodes* Editorial Board. Completed
 - **ACTION ITEM # 48.** President Alberto RICCARDI to inform the PC and *Episodes* Editor, after reception and approval of new proposals by Past President ZHANG Hongren, that the IUGS EC approved all (but one) proposals for *Episodes* Editorial Board. Completed

- **ACTION ITEM # 49.** Treasurer William Cavazza to circulate to EC his proposal of TOR for a new IUGS award. Completed
- **ACTION ITEM # 50.** IUGS EC members to submit within March 2012 their suggestions for an individual's name for a new IUGS award. Completed
- **ACTION ITEM # 51.** Councillor Wesley HILL to produce draft text for all the posters in Brisbane. Completed
- **ACTION ITEM # 52.** President Alberto RICCARDI to inform Past Chair and Executive Director of IYPE that the copyright of the IYPE final report belongs to IUGS and UNESCO. Completed
- **ACTION ITEM # 53.** President Alberto RICCARDI to inform ESM Chair Wolfgang EDER to remove all reference to and logos of ESM from the master copy the IYPE final report. Completed
- **ACTION ITEM # 54.** President Alberto RICCARDI to request the Past Chair and Executive Director of IYPE to transfer the digital copy of the final report of IYPE to IUGS and UNESCO. Completed
- **ACTION ITEM # 55.** President Alberto RICCARDI to prepare an agenda for the meeting with Affiliate bodies at the next IGC. Completed
- **ACTION ITEM # 56.** A Task Group (Councillors TANDON Sampat, Zohra ERRAMI and Treasurer William CAVAZZA) will examine the issues with the PC and provide to the EC a list of candidates for new Chair and members to the EC before Brisbane. - Pending
- **ACTION ITEM # 57.** Letter from President Alberto RICCARDI to the ICS will indicate that the allotted increase in funding for this fiscal is a one time increase to coincide with the IGC. Completed
- **ACTION ITEM # 58.** Letter from President Alberto RICCARDI to GARS requesting information on the non-use of the allocation provided for 2011 and indicating that allotted funding for this fiscal will be provided after the ARC. Completed
- **ACTION ITEM # 59.** Secretariat to arrange printing of the Annual Report for distribution in Brisbane. Completed
- **ACTION ITEM # 60.** Councillors Colin SIMPSON and TANDON Sampat to check on printing costs in Australia and India, respectively, to publish the 2011 Annual Report (100 copies). Completed
- **ACTION ITEM # 61.** Councillors Colin SIMPSON and Councillor TANDON Sampat to check on printing costs in Australia and India, respectively, to publish the IYPE final report (200 copies). Completed
- **ACTION ITEM # 62.** President Alberto RICCARDI to inform the Statutes and Bylaws Committee that the IUGS EC approves in principle the draft version of the IUGS Statutes and Bylaws with the expectation that suggested changes will be integrated. Completed
- **ACTION ITEM # 63.** Councilor Wesley Hill to update IUGS-IUCN TOR before the 34th IGC (Brisbane, August 2012). - Pending
- **ACTION ITEM # 64.** *Episodes* Editor to include in *Episodes* citation and response on IUGS awards to be presented at the 34th IGC (Brisbane, August 2012). – Pending
- **ACTION ITEM # 65.** Secretariat to circulate to the EC a draft of the minutes of the 2012 EC meeting before the end of June 2012. Completed
- **ACTION ITEM # 66.** President Alberto RICCARDI to thank the Spanish National Committee and the authorities of the city of San Sebastian for the excellent organization and facilities provided for the 2012 IUGS EC meeting. Completed

The IUGS 63rd EC Meeting adjourned at 4:05 p.m. on Friday, February 17, 2012.

Respectfully Submitted by Nancy Zeigler.