

# MINUTES



**INTERNATIONAL UNION OF GEOLOGICAL SCIENCES  
69<sup>th</sup> IUGS EXECUTIVE COMMITTEE MEETING  
18<sup>th</sup> – 19<sup>th</sup> January, 2016**

**Dali Hall on 4<sup>th</sup> Floor, Yinruilin International Hotel  
Yunnan Province, China**

## **69th IUGS EXECUTIVE COMMITTEE MEETING PARTICIPANTS**

### **IUGS Executive Committee:**

Roland OBERHÄNSLI (RO; President), José P. CALVO (JPC; Secretary General), DONG Shuwen (DS; Treasurer), Marko KOMAC (MK; Vice President), Yildirim DILEK (YD; Vice President), Hassina MOURI (HM; Councillor), Yujiro OGAWA (YO; Councillor), Stephen JOHNSTON (SJ; Councillor), Amel BARICH (AB; Councillor)

**Honoured Guest:** ZHANG Hongren (IUGS Past President)

### **Observers (attending parts of the meeting):**

Dhiraj M. BANERJEE (IUGS NC India), Brijesh K. BANSAL (36th IGC), Peter BOBROWSKY (Webmaster), Greg BOTHA (35th IGC), William CAVAZZA (Finances Committee), CHAE Byung-Gon (IUGS NC Korea), CHENG Qiuming (IAMG), CHEONG Daekyo (IUGS NC South Korea), HE Qingcheng (GEM), HUH Min (IUGS NC South Korea), KIM Youngseog, (IUGS NC South Korea), Hiroshi KITAZATO (IUGS NC Japan), MAO Jingwen (IAGOD), Benjamin MAPANI (GEM), Patrick McKEEVER (IGCP), Edmund NICKLESS (NASIC), PENG Shanchi (ICS), Dolores PEREIRA (Publications Committee), Oleg PETROV (IUGS NC Russia), Björn SCHOUENBORG (HSTG), Olga SHNEYDER (IUGS NC Russia), WANG Xueqiu (TGGGB), WU Faquan (IAEG), ZHANG Minghua (CGI), ZHANG Jiuchen (INHIGEO)

### **Representatives from national and local Chinese authorities:**

- Ministry of Land and Resources (MLR), Department of Science, Technology and International Cooperation: BAI Xingbi (Deputy Director General), FAN Li (Division Chief), GONG Jingwen, (Project Coordinator)
- China Geological Survey, Beijing: LI, Jinfa (Deputy Director General), SHU, Siqi (Division Chief)
- Division of Geological Survey, Department of Land and Resources of Yunnan Province, Kunming: REN, Jian (Division Chief), ZHOU, Zhaoxing
- Stone Forest Global Geopark: ZHOU Chunlin (Director General), LI Guangliang (Deputy Director General), WANG Yunlong (Deputy Director General), ZHANG, Pengxiang (Deputy Director General)

### **IUGS Secretariat:**

WANG Wei (Director), Anne LIINAMAA-DEHLS (Executive Secretary), LI Wei (Secretary), XU Yaqi (Secretary), CHEN Zhu (IT Specialist)

### **Apologies:**

Alecos DEMETRIADES, A.F. MOROZOV, Alison ORD, Mervin J. D'SOUZA, MENG Wang

## **1. Welcoming Addresses**

R. Oberhänsli (RO), IUGS President, welcomed and thanked the MLR and Stone Forest Global Geopark for hosting the meeting. He expressed on behalf of the Executive Committee their honour for the presence of the former IUGS President Zhang Hongren. President RO gratefully acknowledged China's interest in hosting this Executive Meeting and in IUGS in general. He pointed out that China and IUGS have common interests. He thanked the hosts for arranging the Executive Committee's visit to Kunming and for joining us today.

Bai Xingbi, Deputy Director General of the Department of Science, Technology and International Cooperation of the Ministry of Land and Resources (MLR) welcomed the Executive Committee members and wished them a productive meeting in Kunming.

Zhou Chunlin, Director of the Managing Bureau of Stone Forest Global Geopark, gave a brief description of the area where the meeting was being held and wished all a good stay and visit at the Stone Forest Geopark.

RO called to Zhang Hongren, Former IUGS President, to be awarded with the IUGS Gold Pin. The President noted that this was the first time this gold IUGS Pin had been presented to anyone. Zhang Hongren deserved acknowledgement for his good contribution to science, his excellent administrative skills, and for his long-time support and assistance to IUGS.

Zhang Hongren thanked RO and the Executive Committee members and expressed his gratitude for receiving this honor from the IUGS. He pointed out that this was the first time the IUGS Executive meeting had been in Yunnan province, a special region in China where he had begun his geological career 50 years ago.

The meeting adjourned briefly for a group photo.

## **2. Discussion and Approval of Agenda**

JP Calvo (JPC) called for approval of the agenda.

The Executive approved the Agenda with minor changes due to absence of Alison Ord and Alecos Demetriadis. Items 12.a and 12.c were combined. Y. Ogawa requested that he report on the proposal for a new Task Group on Geo-Hazards. E. Nickless requested that he present a report on the NC of Britain.

## **3. 2015 Executive Committee and Bureau Meetings**

**3.a. Approval of Minutes of the 68<sup>th</sup> Executive Committee Meeting in Vancouver, January 2015**  
Minutes Approved

### **3.a.1. Status of Actions arising from 68th EC**

Anne Liinamaa-Dehls reported that the pertinent actions had been completed.

### **3.b. Bureau meetings in Cape Town (May) and Jixian (October)**

RO reported on the meeting of the International Geological Congress Committee held on 25-26 May in Cape Town. The discussions held provided the impression that Congress organization was going well. In Jixian, 21-26 October, the Bureau focused on the long-term organization of IUGS, the content and recommendations of the ARC Review of Episodes conducted by Vic President Y. Dilek, anticipated, revised MoU with the Geological Society of India, the modernization of *Episodes*, various requests from the Publications Committee, and also matters related to the 4th IUGS-IGC Joint Council to take place in Cape Town, South Africa.

## **4. Executive Committee Reports**

### **4.a. President's Report**

R. Oberhänsli (RO) reported that 2015 was a year of challenge with respect to the visibility of geosciences in intergovernmental and non-governmental organizations. However, two main goals have been achieved: the geoscience division was re-established at UNESCO in Paris and geosciences gained increased visibility within the International Council of Science (ICSU), at the International Union for Conservation of Nature (IUCN) and at the Third UN World Conference on Disaster Risk Reduction (3rd WCDRR) in Sendai.

RO reported that he attended several meetings throughout the year representing IUGS, including EGU in Vienna (IUGS shared a booth with CGMW), a Hazard workshop in UN-WCDRR Sendai (presented a talk and signed an agreement for cooperation with ISDR-ICL 2015-2025); ILP 35 year celebration (Keynote), the IUGG Executive Meeting in Prague, a Geoheritage conference in Toulouse (Keynote), a GeoUnion Meeting in Trieste (RFG Keynote); and a talk on Resourcing Future Generations at a meeting in GeoForschungsZentrum Potsdam.

RO informed all that throughout the year, UNESCO related tasks were pursued including developing the new structure for Geosciences of UNESCO; developing new statutes for IUGS and UNESCO Geosciences; IGCP evaluation in Paris; revising IGCP Bylaws and a presentation to UNESCO Council. The President was in contact with Tim Badman, representative in the International Union for Conservation of Nature (IUCN) to develop a new contract regarding expertise on World Geoh heritage. Finally, Vice President Marco Komac was designated as the IUGS liaison to UNESCO for Geopark expert panel issues.

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

JPC reported on his participation in several meetings in the last year including the International Geoscience Programme (IGCP) annual meeting at UNESCO, Paris, (24-27 February); the General Assembly of EGS, Brussels (24-25 March), and the International Conference on Geoheritage, Toulouse, France, 22-26 September 2015. He assisted in arranging meetings, preparation of the agendas and minutes, and circulating information to the IUGS community. Throughout 2015 he maintained contact

with UNESCO, ICSU, IUGG, and IUCN. The re-organization of IUGS bodies was identified as a priority task at the 68<sup>th</sup> Executive Committee Meeting in Vancouver; therefore, JPC continued to consult IUGS Commissions and Task Groups officers. The combined 2013-2014 IUGS Report, which was released in the first half of 2015, was in a new format, and he received many positive comments. Work had also begun on a new IUGS Brochure to be distributed in Cape Town.

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

Dong Shuwen (DS) reported that IUGS' Financial conditions were stable despite the current weak global economy. The Treasurer presented a table showing the balance of the reserve and current accounts as of 31 Dec 2015 (*2014 shown in brackets*). Total balance as of 31 Dec was USD 1,262,176.56 (*USD 1,238,232.47*). The balance as of year end of IUGS account balance was USD 308,613.00 (*USD 401,258.93*). The total in all three reserve accounts held in Trieste, Italy, was USD 860,917.63 (*USD 930,219.47*). The weakening of the Euro had resulted in a decrease of all three reserve accounts.

DS then presented a table of Income and Expenses (2015 vs 2014). In 2015, the total income to IUGS was USD 519,655.44 (*USD 416,140.38*). For 2015, the total expenditure of IUGS had been USD 424,780.01, USD 9,029.47 less than in 2014. He noted that 78% of 2015 expenditures went into direct support for scientific activities of IUGS; and the remainder to support indirect scientific actions. The USD 485,177.00 budget for 2015 has nearly all been allocated (four projects had yet to be paid).

With regards to the IUGS-UNESCO joint International Geoscience Programme (IGCP), the Treasurer noted that eighteen projects have been supported in 2015 (two for year 2014), with total payment of USD 120,500 (*USD 8,500 for 2014*). IUGS funded eight projects in 2015; the total delivered amount was USD 60,000 whereas UNESCO contributed USD 52,000.

DS addressed the representatives of the Adhering Organizations present, thanking them for their continued financial support to IUGS through their dues payment. He extended appreciation to all Adhering Organizations who continued to contribute financially to IUGS, in particular the Chinese authorities who hosted the current Executive Meeting, the IUGS Secretariat and the Office of the Treasurer.

RO thanked Dong Shuwen for his report.

#### **4.d. Vice President Reports**

Both Marko Komac (MK) and Yildirim Dilek (YD) reported their activities in Geoparks and Publications under the respective agenda items.

#### **4.e. Councillor Reports**

Yujiro Ogawa (YO) and Stephen Johnston (SJ) indicated they would report under the appropriate agenda items. Hassina Mouri (HM) represented IUGS at the Cape Town meeting and compiled the plenary programme for the 35th International Geological Congress, which was submitted in 2015 to the Chair of the Scientific Committee. Amongst other activities where she represented IUGS, the following can be

pointed out: Medical Geology Conference in Portugal, July 2015, sponsored by ICSU, and at the Pan-African University of Ibadan, Nigeria, which is sponsored by the African Union. Amel Barich (AB) reported that she continued to promote IUGS on social media and responded to requests in her role as a Publications Committee member.

RO told the Executive that AB had recently succeeded in fulfilling the requirements for her PhD in Geology. Meeting participants offered their congratulations to AB.

#### **4.f. IUGS Secretariat Report**

Wang Wei (WW), Director of the IUGS Secretariat, informed participants that the Secretariat was hosted at the Chinese Academy of Geological Sciences (CAGS) in Beijing, with seven (7) part-time and full-time staff members. In Brisbane, Australia in 2012, the Chinese Ministry of Land and Resources and IUGS had signed a Memo of Understanding for CAGS to host the Secretariat in China. The Chinese government committed to providing finances to operate the IUGS Secretariat (office space and fittings, salary, travel etc.), and IUGS contributed USD 15,000 per year to support Secretariat activities. The IUGS allocation was used to purchase some office equipment and reimburse travel of Secretariat staff members etc. The Chinese government had already approved the budget to operate the Secretariat in 2016.

The Secretariat had compiled and distributed meeting documentation related to the 68th Executive Meeting (Vancouver, Canada on January 2015); the 69th EC Meeting (Kunming, China on January 2016); the Cape Town Bureau meeting in South Africa (May 2015) and the Bureau Meeting in Jixian, Tianjin, China (October 2015).

WW reported that the Secretariat arranged the booth to promote IUGS at the GSA's GeoExpo 2015 held in October in Baltimore, USA. The Secretariat had also begun the design of an IUGS Website and App., designed and printed the 2013-2014 IUGS Annual Report; distributed E-Bulletins to IUGS, and produced various novelty items, such as 3,000 magnetic stickers and 1,000 rulers.

On behalf of the Staff of the Secretariat, WW thanked the entire Executive Committee, in particular the Bureau, for guiding and supporting the Secretariat in the past year. He welcomed advice and suggestions.

RO thanked the Secretariat for their report and the support of the Chinese government to the office.

### **5. Current Status Resourcing Future Generations (RFG)**

#### **5.a. Progress of advancing the RFG initiative**

Edmund Nickless (EN), Chair of the New Activities Strategic Implementation Committee (NASIC) reported on the progress of formalizing this activity under IUGS. He referred participants to the 2015 Annual Report and the report of the RFG workshop in Namibia. RFG was proposed as an IUGS initiative aimed at identifying and meeting the future need for raw materials, energy and water while ensuring

social equity. The initiative could serve to call the geoscience community to take fundamental decisions and actions related to resources, including evaluation of supply and demand, improved understanding of resource deposits, identification of new resource areas, and capacity building. It recognized that Society needed to secure a supply of raw materials for 20 years from now, develop a multidisciplinary, cross-disciplinary approach that drew together available data to provide modern, innovative interpretations while still providing outreach activities. The drivers for this initiative, EN suggested, would be, land-use conflicts, the fast increasing pace of global economic development, increasing population growth and negative attitudes towards mining.

EN asked the audience “How do we discover new deposits and mine them in ways that are economically, environmentally and socially responsible?” The IUGS Executive at its past meetings agreed on the need to raise awareness among the non-geologists. The Paris Agreement that followed COP21 further emphasized the need for low carbon energy sources, which itself could be viewed as call for the geological community to step forward.

Since the January 2015 meeting, officers had continued to try to raise awareness of RFG, specifically by convening a workshop in Namibia funded in part by IUGS, UNESCO and ICSU. The workshop brought together 17 geoscientists and social scientists who over five days in July 2015 discussed three broad themes. This group of scientists prepared an 80 page report that included the analysis of the problems and specific recommendations. Theme 1 discussed the evolution of demand over the next few decades; Theme 2 analyzed the specific issues in meeting future demand for non-renewable minerals and metals; and, Theme 3 outlined the opportunity for nation building based on resource development, if handled effectively. The recommendations from the report suggested that IUGS could encourage development of international guidelines for planetary mineral consumption; raise awareness of the impacts of mineral consumption from source to product; and, investigate a system for tracking mineral use from source to product, incorporating as a global chain-of-custody programme similar to the concept of "food miles" or sustainable forestry marking.

EN asked the Executive if there is a role for IUGS as the “neutral ground” or “honest broker”? Where does IUGS go from here?

The IUGS President thanked EN for the report. B. Schouenborg, Chair of the Task Group on Heritage Stone as well Qiuming Cheng, President of International Association for Mathematical Geological expressed their interest in RFG and proposed taking up the theme with their officers.

#### **5.b. Resourcing Future Generations - RFG 2018 in Vancouver (S. Johnston)**

SJ reminded the Executive and observers that RFG 2018 developed from the Canadian bid for the 2020 IGC in Vancouver. The inter-Congress event, endorsed by the IUGS Executive, will be held during June 16-21, 2018. Several Canadian earth science and resource-focused organizations have shown interest in the event. Organizers aim to create a world-class conference focused on finding and delivering resources in an environmentally sound manner for future generations, consistent with the IUGS initiative “Resourcing Future Generations”.

SJ referred participants to the first flyer of the event pointing out that many Canadian organizations are partnering to deliver RFG 2018. The Canadian Institute of Mining and Metallurgy (CIM) will provide the technical leadership, and organizational and significant financial support. The Geological Association of Canada (GAC) and Mineralogical Association of Canada (MAC) will hold their annual GAC-MAC event as part of RFG; both will provide significant technical, organizational and volunteer support. The Canadian Federation of Earth Sciences (CFES) is the umbrella organization for earth science in Canada and networks with several other groups. The Geological Survey of Canada (GSC) has also endorsed the event and has begun to consider a specific role.

The event is expected to draw up to 5000 participants and 3500 abstracts and include both pre-and post short courses and field trips. By the end of February 2016, the electronic brochure and website will be completed. In addition, meetings will take place at the January Round-up where CIM-GAC-MAC-CFES Memo of Understanding will be completed and signed. Promotional Material for will be available at the EuroGeoSurveys meeting and PDAC 2016.

The potential RFG2018 themes and sub-themes were presented: 1.The Earth (evolution, process, system); 2. Energy (subsurface energy, sedimentary basins, and surface energy); 3. Minerals (major and minor commodities, new frontiers, etc); 4. Water (energy, minerals, and sources). Cross-cutting sub-themes include new frontiers, resource availability, government roles indigenous people and young people.

In the discussion that followed, DS suggested that the topic of technology and exploration for mineral resources be considered. S. Johnston informed that partner in RFG, Canadian Institute of Mining and Metallurgy (CIM) has a focus on technology and will bring forth this aspect to the meeting. Edmund Nickless thanked Stephen, and agreed that the corporation between the IUGS initiative and the RFG2018 event was sensible and advantageous to both groups.

RO thanked SJ for the RFG 2018 report.

## **6. IUGS – UNESCO**

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

Patrick McKeever (PMc), Chief of Earth Sciences and Geohazard Risk Reduction Section at UNESCO reported that IGCP currently draws scientists from 133 countries (107 in 2014) countries, including 33 African countries (up from 27). Twenty projects received financial support from IUGS and UNESCO, plus four projects were on extended terms. Project Leaders came from 52 countries including 8 from Africa. Nearly 25-30% of scientists leading or participating in projects are women, particularly amongst the younger geologists, and almost 55% of all scientists are from the developing world.



In 2015, UNESCO contributed 72,000 USD to IGCP (incl. 20,000 USD from Chinese IGCP-IUGS NC) and 60,000 USD is from IUGS. The average project support was almost 7,000 USD. In 2015, an external audit was conducted of all of the governing bodies of all of UNESCO programmes, conventions etc. For IGCP, there had been two recommendations: to formalize the statutes and link with IUGS and improve the IGCP pages on UNESCO website. In November, UNESCO adopted the statutes and guidelines of the new International Geoscience and Geoparks Programme (IGGP), as well as established the new label of UNESCO Global Geoparks. It also formalized the creation of new statutes for IGCP and the creation of new governing bodies for IGCP.

PMc told all that as a result of the changes in both UNESCO Global Geoparks and the IGCP, earth sciences now has a higher profile in UNESCO. The role of IUGS is formalized: the international geological scientific significance of a Geopark is evaluated and defined by IUGS. On the third week of December all Geoparks applications will go on line, linked from a map. If a member state objects to the application (territory), it would be removed until the dispute is resolved. The process of application will take 18 months and the period of designation is only 4 years. This year 22 Geoparks are up for evaluation.

UNESCO's Geohazard Risk Reduction programmes aim to establish and strengthen platforms for knowledge exchange and scientific cooperation; strengthen scientific capacities for disaster risk reduction; improving risk information and early warning systems and to make disaster risk reduction a priority through policy recommendations for each member state involved.

RO thanked PMc for his presentation and invited questions from the EC. To YD's concern regarding the low number of proposals received in 2015, PMc suggested that the low level of funding might be making the programme less attractive.

#### **6.b. IUGS-UNESCO IGCP**

RO referred to PMc's presentation and added that change would be on the way, which would be discussed with the IGCP Council. He commented that IUGS has limited funds. Clearly, the USD 7000 average per IGCP project is not enough, even though the seed money and logo generates more money for some projects. Unfortunately, other IUGS activities needed funding, and suffer under IUGS' financial limitations. Yet, IGCP has long tradition, improving the North-South discourse, promoting the transfer of knowledge and networking. IGCP was the oldest scientific programme within UNESCO and served as a template for many other UNESCO programmes. IGCP has been a successful story. Could other UNESCO member states be approached to follow China and Sweden and contribute funds directly into the programme?

#### **6.c. IUGS-GEOPARKS NETWORK (M. Komac)**

MK reported that IUGS has been responsible for the scientific evaluation of Geoparks and evaluators managed 50 evaluations in 2015, which was equivalent to about 2000 working hours. The evaluations of 17 new GGN membership applications were completed in 2015: Beaujolais (France), Belogradchik (Bulgaria), Calestienne, Lesse & Lomme (Belgium), Dunhuang (China), Golden Geopark of Lapland (Finland), Grevena Tethys (Greece), Imbabura (Ecuador), Izu Peninsula (Japan), Lochaber (UK), Mons

(Belgium), Mount Apoi (Japan), Pollino (Italy), Shouf-Jezzine (Lebanon), Sitia (Greece), Toba Caldera (Indonesia), Troodos (Cyprus) and Zhijindong (China). On behalf of the IUGS Executive, Komac had formally thanked all evaluators for their contributions and hard work.

RO thanked MK for his report and invited questions. YO asked what the difference is between Global Geopark and National or Local Geopark. PMC responded that Global Geoparks are recognized by UNESCO and must achieve high standards. A Global Geopark has to be proposed and evaluated to achieve a UNESCO label, and is subject to re-evaluation to maintain the Global Geoparks label. UNESCO does not support national geoparks.

## **7. Annual Reports and Future Plans**

### **7.a. Commissions**

#### **7.a.1. International Commission on Stratigraphy (ICS)**

Shanchi Peng, Vice-Chair of ICS presented on behalf of the Commission which is led by a 3-member Executive Committee and consisted of 16 Subcommissions. One of the main activities in 2015 was the sponsorship of STRATI 2015 - 2nd International Congress on Stratigraphy held at Graz University (Austria), 19-23 July. At STRATI 2015, 361 participants from 47 nations gave 267 oral presentations and 165 poster presentations. STRATI 2019 will be held in Milano, Italy. In addition, the 2015 version of International Chronostratigraphic Chart has been released. The ICS-NSF Joint Workshop "Archiving the Stratigraphic Record" was held immediately after the Strati 2015, with a support of a USD 50,000 grant from the US' NSF. ICS dedicated three GSSPs in 2015 for the base of the Santonian Stage (Cretaceous, Olazagutia, Spain); the base of the Katian Stage (Ordovician, Oklahoma, US); and the base of the Jiangshanian (Cambrian, Zhejiang, China). Finally, the full Commission elected David Harper (UK) as new Chair and Brian Huber (US) as Vice-Chair of ICS for the term 2016-2020. Dr. Peng's report ended with the ICS tabling a motion, seconded by SJ, for the dissolution of the ICS Subcommission on Precambrian Stratigraphy. Discussion concerned review of the history of disfunction of the Precambrian Subcommission. The vote was called and passed unanimously.

The main attention of the ICS is and would continue to be to promote progress on GSSPs by the Subcommissions. There are 34 boundaries that need to be defined by GSSPs, especially those in the Cambrian, Carboniferous, Triassic, Jurassic and Cretaceous. The Ediacaran and Cryogenian Systems need to be subdivided into series and stages to be defined by GSSPs. Peng reported that some subcommissions had made no progress developing GSSP proposals whereas some boundary task group leaders have been inactive, and that webpages of several subcommissions are out of date. He noted that lack of funding from national research councils greatly limits investigations of potential GSSPs, but funding from the U.S. National Science Foundation had been helpful.

In 2016, the new ICS will consider formal recognition of the Subseries/Subepochs for the Paleocene to Holocene Series/Epochs. Various subcommissions will sponsor technical sessions at the 35th IGC and there are plans to establish an Executive Task Group on Geochronology. There are dedication ceremonies planned for 2 GSSPs for the Jurassic System and GSSP for the Toarcian Stage at Penice, Portugal, and GSSP of Aalenian Stage at Fuentelsaz, Spain. There are plans to initiate an international discussion about the new edition of the International Stratigraphic Guide (2020). Finally, ICS will collaborate with the World Heritage Committee of UNESCO for the recognition of all GSSPs as sites of World Natural Heritages.

A supplementary budget was requested to support ICS representatives to travel to the 35th IGC.

#### **7.a.2. Education, Training and Technology Transfer (COGE)**

AB reported on COGE, which had been established in 2004 and whose main objectives have been to identify gaps, develop strategies for the coordination and/or development of new programmes in geoscience education, organize meetings, generate teaching materials and provide training courses.

During 2015, COGE had interacted with many IUGS Affiliated Organizations, Commissions and Task Groups, including GSAf, ESM, YES (African Group), IUGG, IAGETH, IGEO, EFG, and AGID. A survey on the Geoscience Education in Africa was launched in June in the framework of the IUGS-COGE GEO-ERA (Geoscience Education Roadmap for Africa). Preliminary results of this survey were presented during the invited talk of the IUGS-COGE Chair in the Conference on 'Future of Earth-Space Science and Education (Future ESSE)', at the IUGG in Trieste, November 2015. The survey would be active and running until 31 July 2016. Cooperation with the European Federation of Geologists (EFG) was mainly focused on the international project currently coordinated by EFG on raw materials (INTRAW), which had brought together 15 partners with experience in research, innovation, education, industry, trade and international networking across the entire raw materials value chain. The COGE chair had been appointed as expert in one of the three INTRAW panels and had joined the groups' first workshop, held in Slovenia, September 2015.

In 2015, COGE continued to collaborate with the International Association for Geoscience Diversity (IAGD) on a joint booth at GSA exhibit hall. Also, Chris King contributed an article to Episodes: 'The International Geoscience School Syllabus and Its Development' (Episodes, Vol. 38, 1).

#### **7.a.3. Management and Application of Geoscience Information (CGI)**

CGI Council member Zhang Minghua (ZM) presented on behalf of the Commission that served as the geoscience information body of the IUGS. In 2015, CGI continued to aim to represent IUGS on geoscience information matters, provide the means for transferring knowledge on geosciences information and systems, assist international dissemination of best practice in geosciences information, stimulate and support initiatives that develop standards. CGI now has 291 members in 68 countries.

ZM presented the products of CGI in 2015 beginning with the release of GeoSciML v4 (see [www.geosciml.org](http://www.geosciml.org)), which represented a milestone for the working group. The Working Group on Geoscience Terminology continued its activities, and the working group for the development of Earth Resource ML planned to get in feedback from groups like Minerals4EU project. The main activities of CGIs regional groups and activities (Asia, Latin America, North America, Africa and Europe) were outlined.

The main problems faced by CGI were cross-border communication and economic issues. ZM pointed out that there is still no solution for the CGI accounting matters. They hoped that a common way could be found to open IUGS-CGI accounts in order to establish a transparent process for the use of IUGS resources to support CGI activities.

RO thanked CGI for their report and expressed appreciation for CGI's work, and suggested that CGI contact IUGG in order to facilitate sharing of the huge geophysical data, and JP Calvo suggested CGI become more active with Webinar. AB welcomed CGI officers to send her news items on their many accomplishments.

#### **7.a.4. History of Geological Sciences (INHIGEO)**

Zhang Jiuchen (ZJ) reported that the Commission had nearly 300 Members from 57 countries. The main objective of the Commission is to promote the study of the history of geological disciplines at an international and national level. The INHIGEO "Annual Record" is published regularly and is available through their website. Outstanding contributors to their topic are recognized through the "Vladimir V. Tikhomirov History of Geology Award."

Financial and practical support will be offered for students/post doc researchers to attend the INHIGEO Annual Conference to be held during the 35<sup>th</sup> IGC, which will include pre-conference historical field trips retracing the 19<sup>th</sup> century visit of John Hershel and Charles Darwin to southern Africa.

ZJ asked if the IUGS Executive could participate in INHIGEO's 50th anniversary meeting (Armenia, 2017) and requested that the EC approve minor revisions to their Terms of Reference.

RO thanked him for the report, and the issues would be taken up in the closed meeting.

#### **7.a.5. Tectonics and Structural Geology (TecTask)**

JPC reported that the acronym of the Commission of Geodynamics, Tectonics and Structural Geology would be changed, due to the confusion it causes. This was also discussed in item 7.c.

YD informed all that he has been reviewing the annual reports of TecTask for the last four years. TecTask has been running a website called "Outcropedia", which has been a successful aid to teach students to identify geological structures and how to interpret them; therefore, he was pleased to read in this year's report that their photo archive would be expanded and further developed with a newly appointed curator in Canada. In addition, a very successful Tectonic Short Course run by Cess Pacchier in Germany for undergraduate students in Africa provides an excellent service to the international earth science

community. However, YD raised the concern that the TecTask board of officers was not representative enough of the global disciplinary expertise and community and tightly clustered in several main countries. Similar concerns were raised by the EC members during the last several years, and were discussed with Dr. A. Ord at the Vancouver Meeting in 2015. The EC members agreed that the TecTask board of officers should be more global and inclusive.

#### **7.a.6. Geoscience for Environmental Management (GEM)**

Ben Mapani (BM), Commission Chair, announced that the GEM Commission would end at Cape Town. Amongst its objectives: to encourage greater application of the geosciences in sustainable use of resources; to generate and broadly disseminate geosciences information for policy development; to inform decision makers of the role of geosciences to environmental development and management; and to engage key stakeholders in all these issues.

BM informed all that the closing meeting of GEM would take place at the 35th IGC. The GEM working groups on Drinking Water, Natural Hazards and Territorial Sustainability and Man-made strata and Geopollution will either lead or contribute to sessions at the 35th IGC in Cape Town, whereas officers of the Working Group on Dust will participate in the Dust 2016 Conference at Castellaneta Marinara, Italy, in June 2016. The Gold and Mercury Working Group continued its capacity building activities across several continents and planned to arrive at a new estimate of total global mercury use. A proposal for a book will be submitted to the Geological Society of London in early 2016 by the groups Man-made strata and Geopollution. The expertise of members of the Natural Hazards and Territorial Sustainability will be engaged to assess the geo-environmental risks in the Fiambala area of Catamarca Park.

BM informed all that the leaders of GEM have presented a proposal to the IUGS EC for a new Commission entitled "Human activities and the geoenvironment". So far there have been letters of support from some ICSU GeoUnions: IGU, INQUA, ISPRS and IUSS. IUGG has indicated that it will participate if funding is found.

RO thanked for the presentation and informed BM that the proposal will be discussed during the closed section of the Executive meeting. If approved by the Executive, it will be presented to Council for ratification.

#### **7.b. Task Groups, Initiatives and Joint Programmes**

##### **7.b.1. Global Geochemical Baselines (TGGGB)**

Wang Xueqiu (WX) provided a brief history of the task group from its roots as an IGCP project, the publishing of the Final Report IGCP 259 (Darnley et al. 1995), which became known as "The Blue Book" amongst experts, until its development into the IUGS-IAGC Joint Task Group in 1997. Since that time there has been continued and significant progress on geochemical mapping at a global scale.

In 2015, TGGGB held seven training courses in several African countries and Pakistan, and two business meetings were held (Tucson, Arizona-USA and Brussels, Belgium). Representatives from the Task Group

traveled to Windhoek in July to take part in the IUGS Workshop of Resourcing Future Generations. Work continued on geochemical sampling manuals for different types of terrain: Karst, Desert, Tundra, Arctic and Tropical. Criteria for developing a Global Baselines Database were in process of being developed as well as identifying standards that data from mapping projects should achieve in order to qualify for entry into global geochemical database.

The International Centre on Global-scale Geochemistry was approved by the State Council-China Government in September 2015 and it was anticipated that the Centre would be fully operational in 2016, with opening ceremony planned for May. The government of China would contribute ca. USD 3 million for operation of the Centre and to assist researchers in developing countries. In 2016, the group will continue to hold meetings and courses, publish geochemical mapping field handbooks, and support mapping projects throughout the world. They plan to participate actively in the 35<sup>th</sup> IGC.

The Task Group requested to be upgraded to the “Commission on Global Geochemical Baselines”; for support to develop partnerships with country members of the IUGS and assistance in organizing training workshops in developing countries.

RO thanked for the report, noting that sharing of such data was often only on a national basis - Global sharing of data was essential.

#### **7.b.2. Geoheritage (GTG)**

MK reported on behalf of Patrick De Wever, Chair of the GTG, a group that has been developing an inventory of geoheritage sites. MK pointed out that these sites were often isolated (a quarry, a single outcrop) and most would never qualify for a geoparks status, but they were valuable for education and for testimony of the history of the earth.

#### **7.b.3. Heritage Stone (HSTG)**

B. Schouenborg (BS) reported on the objectives of HSTG, which were to assemble, safeguard and disseminate information about stone types (natural, dimension, building) of international importance. In pursuit of this, HSTG aimed to facilitate a format for formal designation of natural stones that have achieved widespread recognition in human culture, develop “Global Heritage Stone Resource” (GHSR) as a term for international designation and, promote the adoption and use of the GHSR designation internationally and nationally. As of January 2016, the number of HSTG correspondents was 237 geologists from 53 countries.

In 2015, the HSTG achieved the following milestones and deliverables: IGCP project 637 “Heritage stone designation” was approved. The IGCP funding was used for sponsoring attendance to the GSA Conference in Baltimore, November 2015 and to create a new website. A GHSR checklist/template was developed to be used for the description and nomination of a stone. The GHSR nomination Portland Stone (UK), published in “Episodes” was formally approved in April. An “Interim List of potential GHSRs”

has been maintained and an annual procedure for assessing additional GHSR nominations has been approved and will be implemented in 2016. The Task Group has published with the Geological Society of London (Special Publication 407, "Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones" edited by D. Pereira et al.); a Special Heritage Stone issue of "Episodes" March 2015 was compiled, and two Building Stone Field Guides were produced by the Geological Society of America by J.T. Hannibal to support the 2015 conference in Baltimore, USA. Task Group members have led major Heritage Stone events in Vienna, Madison (Wisconsin) and Baltimore (Maryland, USA). Finally, in 2015 D. Pereira gave an invited presentation on heritage stone to the International Congress – Geoheritage Inventories: Challenges, Achievements and perspectives, Toulouse, France, September 2015. The group's main congress plans is a session at the EGU in Vienna (Austria) and a session at the 35<sup>th</sup> IGC in Cape Town. In addition splinter and business meetings are planned in these two congresses. There is a new website [www.globalheritagestone.com](http://www.globalheritagestone.com) and its development will be ongoing.

This website provides information on the new international designation. Numerous publications are planned for the future including an article for the journal "Geosciences" and the Geological Society of London.

To be discussed in the near future is the proposal for merging this task group with that on Geoheritage into a new IUGS Commission. It should be described, proposed and discussed in Cape Town, accepted by the EC before forwarding to Council for ratification.

RO thanked HSTG for their report, and highlighted the need for the merging of the two groups into a new Commission.

#### **7.b.4. Global Geoscience Professionalism (TGGGP)**

P. Bobrowsky (PB) reported on behalf of the Committee noting that meetings had been held online monthly, the website at [www.tg-ggp.com](http://www.tg-ggp.com) had been updated with funds provided by IUGS and task group officers had presented at the EGU (Vienna), AGU, GAC-MAC (Montreal) and AIPG (Alaska). The group planned to contribute to the 35<sup>th</sup> IGC with a good range of talks on Global Geoscience Professionalism and Geoethics. For 2016 the task group will work to increase its visibility geoscience community globally, create a series of sub groups focused professional affairs, including professional ethics in practice, mineral resources reporting, and human resources capacity.

#### **7.b.5. Initiative on Forensic Geology (IFG)**

JPC referred meeting participants to the detailed written report submitted by Laurance Donnelly. The Initiative was a global network of 28 officers, three of whom were added in 2015. Approximately 48 separate forensic geology events were held in 2015. There were about 71 IUGS-IFG related publications and web sites available, significant milestones include distribution of training documents to police forces and drafting the document 'a Guide to Forensic Geology'. IFG will be represented in Cape Town.

JPC pointed out that there will be an Ad hoc Review Committee established to assess the progress of this group and that the review will be performed in the next couple of months.

#### **7.b.6. International Lithosphere Programme (ILP)**

RO presented on behalf of ILP, a group he once served as its Secretary General. According to the Terms of Reference published in 2008 and renewed in 2011, ILP is a body of IUGG and IUGS that seeks to elucidate the nature, dynamics, origin and evolution of the lithosphere through international, multidisciplinary geoscience research projects and coordinating committees. The ILP is charged with promoting multidisciplinary research projects of interest to both the geological (IUGS) and geophysical (IUGG) communities. RO reported that with regards to topics the task groups have not changed over the last years. YD raised his concern about the consistent and persistent Euro-centric and mainly male board of its officers over the years, and pointed out that this issue has been as a problematic issue by the geologists, geochemists and geophysicists of the global earth science community. RO replied to acknowledge this issue and stated that efforts would be made to change the pattern.

#### **7.b.7. Isotopes and Geochronology (TGIG)**

RO read from the report the two important milestones in 2015: The evaluation and recommendation of the decay constants and half-lives of geologically relevant nuclides has resulted in two publications. The first Task Group recommendation on half-lives was published in September 2016. RO pointed out that the group was seeking to establish an important standard that is re-defining “the year” where further progress was expected for 2016.

#### **7.c. Discussion on reports and decisions on the re-organization of Commissions and Task Groups**

JPC presented his suggestions for reorganization. Firstly, the upgrade of the Task Group on Global Geochemical Baselines to a Commission, which had begun as an IGCP project in 1988, and resulted in the standard guidelines for geochemical mapping, the ‘Blue Book.’ By 2012 UNESCO approved the International Centre on Global-scale Geochemistry (Lanfang, China). There is opportunity for Geochemical Baselines to collaborate with the IUGS Initiative on RFG and other projects, such as One Geology, GEOSS, Future Earth-ICSU, and Joint Task Group on Isotopes.

JPC suggested possible changes to the internal rules, officers and activities of the Commission on Tectonics, and noted the EC suggestion that ‘geodynamics’ be included in the name of the commission, i.e., Commission of Geodynamics, Tectonics and Structural Geology, as the acronym TecTask causes some confusion. JPC expressed complains about lack of collaboration from the current TecTask in making and implementing the necessary changes. YD also stated that the 2015 annual report submitted by the TecTask officers lacked proactive efforts in serving the global disciplinary expertise and its members.

JPC continued by suggesting the merger of the Geoheritage and the Heritage Stone task groups into a new IUGS Commission, whose main objective would be to meet the growing requirements from UNESCO, IUCN, ICSU, and other Geo-Unions dealing with topics related to the geological perspective of heritage. One reason for merging and upgrade of the two groups was the coordination and advise by experts that could identify and evaluate sites and materials of geological significance. He envisioned that the new Commission could include two subcommissions: a Subcommission on Heritage Stone and a Subcommission on Geoheritage sites.



To end, JPC addressed the proposal to create a GeoHazard Task Group. The scope of the task group would be 1] To exchange, propose, stimulate, and support research, education, capacity building, societal support and governance on the natural science of geohazards; 2] To summarize the research and education organization, gather, distribute and inform and share relevant results and information on future work on geohazard science; 3] To support educational programmes of geohazards, particularly for capacity building and related scientific works in developing countries; 4] To facilitate the knowledge transfer a) horizontally (between scientists within and outside disciplines) and b) vertically (between experts and a general public on one side and politicians/decision-makers on the other side), and 5] To organize international collaboration teams, sessions, workshops and symposia in international conferences and meetings (e.g. JpGU, CGU, EGU, AGU, GSA and else). It is expected that the TG will operate for the period of four years.

With regard to the proposal for the GeoHazards group, YO pointed out that hazards was the study of potential disasters but currently most of the money went to rescue and mitigation, rather than to the study of the natural geohazard phenomena. From the datasets produced by geophysicists and geologists we see that earthquakes are not just shaking events but also faulting, which is an important aspect to consider when attempting to accurate prediction of earthquakes, and allow enough time for people to move to safety.

With regard to the new Commission on Geoheritage, Bjorn Schouenborg stated that his group (HSTG) was in favour of the merger. L. Pereira informed all that there was a working document for the guidelines already for setting up the new Commission.

E. Nickless, as the Chair of the New Activities Strategic Implementation Committee (NASIC), pointed out that the activities should lend themselves to the Resourcing Future Generations theme. To this, R. Oberhänsli suggested a Task Group on Resourcing Future Generation. EN agreed that currently RFG was a body outside of the structure of the IUGS, also that there must be better engagement in RFG from the IUGS family before they go forward with the proposal to the International Geological Congress (IGC).

## **8. International Geological Congress (IGC)**

### **8.a. 35th IGC in 2016 (Cape Town)**

G. Botha (GB), 35<sup>th</sup> IGC Secretary General, drew the participants' attention to the recent change in the global economic environment that could impact the Congress. Global mining stocks had lost USD 1.4-trillion since 2011 and the global mining index had dropped to an 11-year low. He provided the current statistics of the event: 569 delegates from 62 countries had registered and 558 abstracts had been submitted. The January 31st deadline for abstracts would be extended. About one-third of the exhibition stands had sold, and many would be reformatted and made smaller and cheaper for universities and other non-profit organizations. Registration fee to the Congress was now 600 USD, down from 800 USD due to the devaluing of the ZAR.

Discussions regarding the special issue of *Episodes* have been ongoing due to the size of the volume. Lola Pereira and Yildirim Dilek suggested further discussion with GSI with regards to publication. A fewer

number of chapters could be considered or reduction to 4 pages per paper. GB thanked all for the suggestions and would take all comments into consideration.

#### **8.b. IUGS Awards to be given at the 35th IGC**

RO displayed the list of awards. Several are given out at the occasion of the International Geological Congress, and a few are presented during the Opening Ceremony of the Congress.

- IUGS Émile Argand Award (active, major achievement or accomplishment)
- 2015 Episodes Best Paper Award
- James Harrison Outstanding Achievement Award
- IUGS Science Excellence Awards 2016 in Environmental Geology, Geological Education, Geoscience Information, Vladimir V. Tikhomirov History of Geology Award, Digby McLaren Stratigraphy, and Structural Geology
- IUGS Hutchison Funds

#### **8.c. 36th IGC in 2020 (New Delhi)**

Dhiraj M. Banerjee (DB) presented the progress on the 36<sup>th</sup> IGC. He informed that the Congress would be hosted by the Ministry of Mines (MoM) & Ministry of Earth Sciences (MoES), Government of India and actively supported by the Indian National Science Academy (INSA). The Preparatory Committee is functioning and led by the Joint Secretary (MoM) Niranjana K. Singh. The venue of the Congress would be the India Expo Centre & Mart (IEMM) in the National Capital Region, Delhi, venue that had already been approved by the IUGS Bureau. A legal entity i.e., 36th International Geological Congress Society (36IGCS) has been formed. The Secretary General will be soon appointed. Shailesh Nayak has been appointed as President with DG, GSI as Co-president. The Local Organizing Committee is being constituted and website 36igc.org has been redesigned. The 24 Symposiums have already been identified by Indian geoscientists as well as field trips. DB also listed various other activities.

YD raised two issues: Accommodation and visas. DB informed all that the organizing committee will handle these issues and the LOC will negotiate and involve the Ministry of External Affairs to expedite clearance of visa applications (soon to go electronic). DB added that the event was still a long way off. He reported that many new hotels are nearing completion in the vicinity of the Congress site so that enough accommodation will be available.

These issues need to be closely followed in the future to facilitate smooth registration process to the 36<sup>th</sup> IGC.

### **9. IUGS Membership**

#### **9.a. Report on Membership Status**

DS provided an overview of the status of membership of Adhering Organizations. Currently, 63 Members are active. Immediate action would be required to inform Argentina, Bulgaria, Egypt, Iran,

Mexico, Ukraine and France of their status. Despite the reduction in the number of Active members, compared to 2014, the total revenue received increased by USD 103,515.06 in which the membership receipts increased by USD 82,727.54.

He was pleased to announce that Greece, Philippines, Kazakhstan, Zambia and Tanzania' status changed from "Inactive" to "Active"; Peru, Austria and Gambia's status changed from "Pending" to "Active" by the end of 2015 and noted that Columbia, Ecuador and Morocco were in progress of reactivating.

The issue would be discussed in greater detail during the closed meeting.

## **9.b. Reports from IUGS Adhering Organizations**

### **9.b.1. Canada**

SJ referred to the written report.

### **9.b.2. India**

DB gave the Indian Report to IUGS by INSA National Committee on IUGS-INQUA (2014-2015). Events and Meetings in 2014 and 2015:

- IAMG International Workshop "Geostatistical & Geospatial Approaches for the Characterization of Natural Resources in the Environment" (JNU)
- "Predictive Near Surface Geosciences - Monitoring and Modeling" hosted by National Environmental Engineering Research Institute, Nagpur
- "XII-International Symposium on Antarctic Earth Sciences" hosted by the National Centre for Antarctic and Ocean Research, Goa
- Paleogene of Indian Subcontinent hosted by the Geological Survey of India and Birbal Sahni Institute of Paleobotany, Lucknow
- Himalaya – Karakoram - Tibet Workshop, WIHG, Dehradun, October 2015
- Event chronology of Indian Precambrian, National Geophysical Research Institute in Hyderabad in March and Delhi in May
- National Colloquium on Micropaleontology - Stratigraphy, Aurangabad, December, 2015.

Projects in 2015 included: The Deep Bore Hole Drilling in Koyna (Ministry of Earth Science Sponsored Project), the Koyna Deep Drilling Project and Arabian Sea Drilling: IODP 355.

### **9.b.3. Japan**

Hiroshi Kitazato reported on behalf of the Japanese National Committee for IUGS, which is under the authority of the Science Council of Japan. After the Tohoku Earthquake Japanese Science had come to a turning point: they would strive go beyond the "Science for Science" perspective to "Science in, with, and for Society" To achieve this, Scientists would need to improve communication and share their results with students, citizens, stakeholders and others, as well as to encourage and support future geohazard researchers, through education and prioritize "Open Science" (journals, data). The geoscience

community would increase activities related to capacity building in earth sciences, in an effort to reduce geohazards. In March 15, 2015 a public forum of the 3rd United Nation World Conference on Disaster Reduction was held in Sendai, Japan, and was attended by Prof. Oberhänsli, Dr. McKeever and the IUGG Secretary General, as well as numerous representatives from developing countries. In November 2015, the Tokyo University of Marine Science and Technology hosted the meeting entitled "Nursing young geoscientists who can work for geohazard prevention, reduction and mitigation." The Geoparks theme continued to be important in Japan, which hosted eight Global Geoparks and 31 National Geoparks as of the end of 2015. As recommended in the IGGP Guidelines, the Japanese Geoparks Committee would become the National Committee of Geopark in Japan under the Japanese National Commission for UNESCO. Besides attending the 35<sup>th</sup> IGC in Cape Town, the Japanese National Committee informed that they were looking forward to hosting the 10th International Earth Science Olympiad which will be held at Mie Prefecture, central Japan on August 20 - 27, 2016. They estimate that more than 30 countries will join in IESO 2016.

#### **9.b.4. Russia**

Dr. Oleg Petrov reported that Russia expected to upload Geological maps to OneGeology at the scale 1:200,000 covering the ex-USSR territory, by the 35th IGC. The project "Atlas of Geological Maps of Circumpolar Arctic at the scale 1:5,000,000" initiated in 2003 to study geological structure of deep-water parts of the Central Arctic and their correlation with the shelf structures and the rimming dry-land of the Arctic continues under CGMW. The project is being carried out by geological surveys of pre-Arctic states such as Russia, Norway, Denmark, Canada and the USA. All products related to Circumpolar mapping will be presented at the 35th session of the International Geological Congress in Cape Town. The tectonic map of the Atlas will be coordinated by Russia.

In order to further expand the international cooperation in the field of geological mapping, Russia has prepared and submitted a bid to host the 37th session of the International Geological Congress in 2024 in Saint-Petersburg under the preliminary motto "Uniting the Earth and Time".

The selection of Russia and Saint-Petersburg as a host of the 37th IGC would not be random but highly symbolic, since the country has already hosted the 7th, the 17th and the 27th sessions. CIS countries and countries of Central Asia are going to partner in organizing a scientific program and a program of field geological excursions.

Irrespective of the 37th IGC's venue, the director invites the EC to hold a meeting in Saint Petersburg and to visit the Russian Geological Research Institute – VSEGEI.

#### **9.b.5. South Korea**

Min Huh, President of GSK, presented the Activity Report of the Geological Society of Korea. In 2015, they held meeting on Structural & Energy Geology, a field camp for Geology students and a geological symposium and workshop for the public. The Korean NC had recently presented its letter of intent to host the 2024 IGC in Busan, Korea. They hope to introduce "Cyber" field trips, new areas for next generation geology, and host an event that could contribute to Korean Unification. The presenter

ensured that Korea would meet the needs of a large Congress like the IGC: infrastructure, transportation, accommodation and security.

#### **9.b.6. United Kingdom**

Edmund Nickless (EN), the former Executive Secretary (as of Oct 1, 2015) of the Geological Society of London highlighted a few activities of the UK NC in 2015. To promote the 'Year of Mud' in 2015, GSL had coordinated various activities starting with the unveiling of a plaque to William Smith, followed by the first public showing of early edition of the geological map of England found that had been recently discovered in the Society's archives. GSL's major report on "Geology for Society" in 2014 had been translated into 13 other languages, and launched at the European Parliament in Brussels in June 2015. It was hoped that the report could help to policy makers and the public understand how earth science knowledge could contribute to society, the economy and solving environmental challenges. In partnership with ESRIUK, an App was launched to display the list of "100 Great Geosites".

EN commented on the format of the new IUGS 2013-2014 Report, which was well received by the Society. Apart from continuing work on Resourcing Future Generations, GSL foresees no change in its activities related to IUGS, but he encouraged the IUGS Executive Committee to develop and deliver a focused strategy. GSL needs the IUGS to provide with the ammunition to enable to make this case. GSL will review its level of subscription to IUGS in late 2016 following the 35<sup>th</sup> IGC. In addition to their IUGS subscription, GSL and the UK community make a major contribution in kind to the IUGS through extensive involvement in its organization and activities.

### **10. International Council of Science (ICSU)**

#### **10.a. IUGS-ICSU relations**

RO commented on difficulties to maintain relations between ICSU and IUGS due to changes in the Executive Committee every four years, while ICSU changes its members of the Executive Board every three years. In general, IUGS has a very well-established contact with ICSU representatives. Thus, the representative program director of the ICSU African Office participated in the team work of RFG report held in Namibia, July 2015. RO has got a response from the authorities of Future Earth on the documents commenting on the research plan of Future Earth. These documents, comprising 70 pages and available on the homepage, were distributed shortly before Christmas and feedback will probably arrive around April.

RO reported that ICSU was proposing a change in the voting system, which would mean that Scientific Unions have less influence. Every Union was asked to respond to the 17 January letter "possible change to the voting system". It was suggested that some Unions could respond by leaving ICSU. RO would consult the other GeoUnions and ICSU should be sent a reply very soon.

### **10.b. ICSU Grants Program**

Along with IUGG, RO submitted a grant application to ICSU, and received funds to hold the RFG workshop in Namibia. He noted that the ICSU grant programme is open to the IUGS family, with IUGS as the leading applicant. RO: It would be good if more grants requests came from the IUGS Community.

### **11. IUGS – GeoUnions - IUGG relations**

RO commented that the GeoUnions had been very active in communications throughout the year. The annual GeoUnions meeting provides a good platform for discussions. The next GeoUnions meeting will be a day before the ICSU meeting in Paris in April 2016, coincident with the ICSU meeting, thus generating no other extra costs.

### **12. Publications**

#### **12.a. Episodes and GSL Books**

Lola Pereira (LP), on behalf of the Chair of the PC Brian Marker, reported that the main task of the Publication Committee in 2015 was to increase the impact factor of *Episodes*, a task that had been achieved. *Episodes* published four issues last year alternating between general and focused themes. For 2015, two issues, focused on the themes of Heritage Stone and Ophiolites were published. The impact factor of *Episodes* has recovered from 0.95 in 2012 to 1.4 in 2014 and to 2.0 in 2015.

*Episodes* received 84 manuscripts in 2015, more than in 2014. The Editorial Board of *Episodes* had 20 members by the end of 2015, but about 12 more are needed to cover additional topics and improve geographical and gender balances. LP informed all that calls to join the Editorial Board had been included in the E-Bulletin (November 2015), but only a few responses had been received. The guidance notes to the Editorial Board, contributors and guest editors had been maintained and updated as necessary. All papers have been registered for DOI numbers from December 2015 onwards. IUGS logo and dates of submission and acceptance have been included on the first page of each paper.

LP reported that the Publication Committee managed to publish 4 books in 2015. Although very few IUGS books were offered to the Geological Society of London (GSL) during the past 3 years, it is likely that 7 or 8 titles will be published during 2016. It is important that the 35th IGC Committee has been requested to make leaders of IUGS sessions at the Congress aware of the need to offer any resulting books to the GSL. Besides, the Publication Committee thanks RO and PMc for their assistance in publishing IGCP projects.

In a discussion that followed, YD reminded that the EC had asked him to conduct an ARC review of *Episodes* and to examine the MOU with the Geological Society of India (GSI). YD had recommended that EC members be more closely involved in functioning of *Episodes*. According to recent statistics, a high peak of paper downloading on the journal website, citation of *Episodes* papers, and impact factor fluctuations have been coinciding with the thematic issues and special issues. It is clear that publishing thematic issues edited by some proactive scientists is a very important contribution to the journal.

During the ARC review in Bangalore, the Publications Committee decided that two thematic issues per year would be a good way to amplify the recognition of *Episodes*. Each issue of *Episodes* should include a cover article invited only, an important method to raise the visibility of the journal. YD highly recommended that *Episodes* must adopt an online editorial system. He pointed out that the current MOU of *Episodes* was up for renewal in August 2016.

#### **12.b. Website**

Peter Bobrowsky (PB) presented a Google Analytics report of the iugs.org. In the year of 2015 there were 25,751 users of and 76,723 page views on the IUGS website, which marked a 10% increase in visits to the website compared with the year of 2014. 78.2% users were returning visitors and the remaining 21.8% were new visitors. The most popular hits were directory, calendar and publications. The top 10 visiting countries were the U.S.A., Brazil, China, India, Nigeria, Spain, Italy, the U.K., Germany and Canada.

#### **12.c. E-bulletin**

AB reported that the IUGS E-Bulletin was prepared by Amaury Pourteau, Post-doctoral researcher at the Institute of Earth and Environmental Science Potsdam University. RO, on behalf of the EC, expressed his sincere thanks to Amaury Pourteau for his work and contribution.

#### **12.d. Social Media**

AB reported that IUGS used social media for communications with the public, including Facebook, Twitter and LinkedIn. As of January 2016, there were 3,080 followers on the IUGS Facebook page. As regard to Twitter, three accounts merged into one main account @theIUGS with 50 followers so far. There were 276 members on the IUGS LinkedIn page. AB introduced the communication strategy from three aspects: to identify the needs of the IUGS, problematic and limitations and strategy establishment and implementation. As for the year of 2016, the following improvements are foreseeable: increasing online membership and activity, exploring new online platforms, dynamization of current platforms, and implication of IUGS committees and task groups.

#### **12.e. New Promotional Products**

WW introduced that the IUGS Secretariat designed several promotional products including magnetic stickers, rulers, notebooks, ties and vests. 3000 magnetic stickers have been produced for the 35th IGC. The new IUGS brochure and the chronostratigraphic timetable will be included in the notebook. The vests are gifts presented to the participants of the IUGS-IGC Council Meeting during the 35th IGC.

### **13. IUGS Committees**

#### **13.a. Nominating Committee**

RO presented a brief overview of the gender and country of origin of the candidates received so far for the positions on the EC. No nominations for the Nominating Committee have been received. The Nominating Committee reports to Council and not to the Executive Committee.

### **13.b. Finance Committee**

William Cavazza (WC) thanked the IUGS EC for appointing him Chair of the Finance Committee (FC). The mandate of FC is stipulated in the Statutes. The FC was established six weeks earlier and consisted of Danie Barnardo from the Council for Geosciences (South Africa), Maria-Glicia da Nobrega Coutinho from CPRM in Rio de Janeiro (Brazil) and himself.

WC informed that the IUGS Strategic Action Plan (2000) had recognized the need for IUGS to re-establish an Advisory Board for Finance (ABF) with the main goal of seeking new external funds. The reestablishment of an ABF was advocated by the IUGS Strategic Planning Committee at the IGC Brisbane 2012. Furthermore, the Strategic Action Plan (2000) and the Mid Term Vision and Strategic Action Plan (2002) also considered that the Union's financial situation could be improved and proposed a number of specific strategies.

The main objective of the Strategic Action Plan was to broaden the funding base of the IUGS, which identified three specific areas, including investment in financial assets, electronic commerce of IUGS products and royalties of commercial sales of IUGS publications. WC showed the current situation of the first IUGS financial investments, with the total investment up to 200 000 USD up to now. The Mid Term Vision and Strategic Action Plan (2002) were aimed at initiating or actively supporting major events and pro-person contribution from registration fees collected in the IGC.

WC concluded by informing all that in the next few months the FC planned: to arrange, in agreement with the IUGS Treasurer, for an independent external audit of IUGS finances, to prepare a general report verifying the allocation of funds in relation to the strategic priorities and missions adopted by the EC, and to outline possibilities for increasing funding. WC recommended that the next FC be established as soon as possible, preferably right after the Council meeting in order to fulfill its mandates.

### **13.c. Publications Committee**

LP reported that in 2015 the Publications Committee (PC) continued to rebuild *Episodes* in collaboration with the Episodes Ad-Hoc Review, investigate costs and steps towards online first and online only publication of *Episodes*, expand the Editorial Board of *Episodes* and secure a forward programme of strong thematic issues of *Episodes*. The PC met in Bangalore in April 2015 alongside the *Episodes* Ad-Hoc Review. The PC assisted with English language editing of various IUGS documents, secured translations of the IUGS brochure text into 16 languages, and the PC Chairman dealt with requests for copyright permission to use material from *Episodes*. In 2016, the key tasks of the PC include the following: to implement findings of the Ad-Hoc review of *Episodes* publication; to prepare a "Mission and scope" statement for *Episodes* prior to the 35th IGC; to negotiate a new MOU for publication of *Episodes* for the period 2017 - 2020; to modernize *Episodes* as an online only and online first publication; to continue to improve impact factor of *Episodes* by proactively seeking high quality content and topical thematic issues; to seek a 33% increase in members of the Editorial Board of *Episodes* to improve topic coverage and geographical and gender balance; to maintain and update guidance documents; to seeking advertisements to bring in revenue to support *Episodes*; to finalize a statement of publications policy



and ethics for *Episodes*; and to assemble documentation for the use of the Publications Committee after September 2016.

#### **14. Amendments of IUGS Statutes and Bylaws**

JPC presented SJ's proposal for amendments to the Statutes related to Affiliated Organizations. The proposed revised wording was as follows:

*16. International scientific organizations may apply for affiliated status, if they are actively involved with IUGS activities. Approval of an application by the Executive Committee is subject to ratification by the Council. Affiliated status is maintained for the life of the joint project, or for a maximum of 5 years. If they are actively involved with IUGS related activities, organizations can apply for renewal of their affiliated status.*

*17. 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.*

The above amendments would be further discussed and re-circulated to the Executive Committee before being submitted to the IUGS-IGC Council at the 35th IGC for ratification.

RO and other representatives commented that the items in the IUGS Statutes and Bylaws concerning the appointment of Nominating Committee (NC) required further consideration. RO suggested that he would come up with a clearer wording on the Nominating Committee in the IUGS Statutes and Bylaws to be considered by the EC and ratified by the IUGS-IGC Council at the 35th IGC.

#### **15. Reports from IUGS Affiliated Organizations**

##### **15.a. International Association of Engineering Geology and the Environment (IAEG)**

Wu Faquan, IAEG Secretary General, reported to the EC. IAEG was founded in 1964 at the 22nd IGC in New Delhi and the IAEG Secretariat was relocated to China in 2011. IAEG currently had 57 National/Regional Groups, 36 Commissions, 4162 individual members and 23 Associate Members. IAEG organizes yearly quadrennial Congress (IAEG 2018 in San Francisco) and two yearly regional conferences (Euro Regional Conference 2016, Sofia; Asian Regional Conference 2017, Katmandu) and also sponsor international symposia and workshops. The IAEG Journal was "Bulletin of Engineering Geology and the Environment" (by Springer, 4 issues a year). IAEG presents the Hans Cloos Medal, Richard Wolters Prize, Marcel Arould Medal and Science and Technology Award. In 2015, IAEG organized the following meetings, including Executive and Council Meetings in New Delhi, an International Conference with the theme of "Engineering Geology in New Millennium 2015" (New Delhi, India, October 27-29, 2015), the 10th Asian Regional Conference with the theme of "Geohazards and Engineering Geology" (Kyoto, Japan, September 26-29, 2015) and Federation of International Geoengineering Societies Board Meeting and International Forum (Shenyang, China, July 4-7 2015).

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

Xiang Junfeng, on behalf of IAGOD President MAO Jingwen, reported to the EC. IAGOD was formally established during the IGC in New Delhi, India in 1964. Currently IAGOD had 10 National Groups and about 700 members from around 50 countries. Under IAGOD, there were 15 Commissions and Working Groups. The 14th Quadrennial International Association on the Genesis of Ore Deposits Symposium was held in Kunming, China on August 19-22, 2015, during which a new IAGOD Award - "the Kutina-Smirnov medal" was created. PACRIM 2015 was held in Conrad Hotel, Hong Kong from 18-21 March 2015. In 2015, IAGOD organized the following conferences, including Russian National Scientific-Practical Conference "Geology and Mineral Resources of North-Eastern of Russia" (Yakutsk, March 31-April 2, 2015), Session SS-28 "Sedimentary hosted Mineralization and Placer Deposits" during the 31st IAS Meeting on Sedimentology (Krakow, Poland, June 22-25, 2015), the 15th International Conference on "Placer Deposits and Weathered Crusts: Research, Development and Ecology" (Perm, Russia, August 24-29, 2015) and the First International Geosciences Conference "Geosciences and Politics, Economy & Culture in a Changing World" (Tehran, Iran, February 18-19, 2014). Since April 2003, IAGOD adopted the Journal "Ore Geology Reviews" (OGR), published by Elsevier, as the official scientific journal. The impact factor of OGR reached 3.558 in 2014, with a 5-year impact factor as high as 4.07. IAGOD expressed the interest in collaborating with the IUGS initiative RFG by offering international cooperation networks and academia/training supports. IAGOD sponsored 4 Sessions at the coming 35th IGC.

#### **15.c. International Association for Mathematical Geosciences (IAMG)**

Qiuming Cheng, IAMG President, reported to the EC. IAMG became affiliated to IUGS in 1961. The IAMG 2015 Annual Conference was held in Freiberg on September 5-13, 2015 with more than 300 participants from over 34 countries. IAMG sponsored specialized workshops, including CoDA-2015, the 6th International Workshop on Compositional Data Analysis in Girona, Spain on June 1-5, 2015 and the International Workshop on "Marginal Seas and their Coastal Areas - Transit and Buffer Zones in Continent - Ocean Interaction" in Yantai, China on 18-19 September, 2015. A session on "Multifractal Modeling and Local Singularity Analysis in Mineral Exploration and Environments" was held at EGU2015 in Vienna on April 14-18, 2015. IAMG also co-sponsored the Danie Krige Geostatistical Conference "Geostatistical Geovalue - Rewards and Returns for Spatial Modeling" hosted by SAIMM in Johannesburg, South Africa on August 17-19, 2015. The IAMG planned to actively participate in the 35th IGC, particularly with symposia under the Theme "Mineral Resources, Evaluation and Mathematical Geosciences". During 2015, student and post-doctorate research and activities were financially supported by US\$ 40,000 mainly for research and travel grants. IAMG published 270 papers in its 3 journals, 400 abstracts/extended abstracts for IAMG 2015 Conference, several books and several special issues published in other journals. Qiuming Cheng also introduced the frontiers and progress of mathematical geosciences. IAMG expressed their interest in collaborating with the IUGS initiative RFG.

#### **15.d. Young Earth Scientists Network (YES)**

AB, YES Vice President, reported to the EC and referred to the submitted report. YES Network co-organized "the Second National Congress for Young Geologists of China" in Chengdu, China on April 22-24, 2015 and "the First International Congress on Geoheritage" in Huanjiang of Guangxi Zhuang Autonomous Region, China on June 4-7, 2015. YES Network co-hosted one session "Culture and

Geoheritages, Both Recorder of the Global Change along the Silk Road for Future Sustainable Development” during the International Geographical Union (IGU) Congress in Moscow, Russia on August 17-21, 2015, and co-sponsored together with China University of Geosciences (Wuhan) “the First Silk Road Young Leader Forum” in Wuhan, China on October 16-18, 2015. With the support by EuroGeoSurveys, YES Network made registered in Brussels, Belgium. A new YES Network website was launched. The YES Communications Team launched the “Geoscience in Your Language” Project to encourage YES members to share their geoscience experiences in their native languages. The YES Network ran a one year survey about Women in Geoscience, the outcome of which would be published in 2016. YES Network proposed 4 sessions at the 35th IGC.

RO commented that the YES sessions during the 35th IGC shall not be separated from the rest of the Congress but highlighted with a special logo

#### **16. Other Businesses**

RO welcomed contributions from the participants.

EN suggested that a summary of the EC meeting be sent to meeting participants, in order to strengthen communications.

Qiuming Cheng from IAMG expressed the interest in collaborating with the IUGS initiative RFG and suggested joint IGCP projects on minerals assessments. Edmund Nickless positively responded to call for project proposals.

WC suggested that the renaming from the IUGS STENO Award to the IUGS Émile Argand Award be officially approved by the IUGS Council due to the fact that the STENO Award was previously approved by the Council during the 34th IGC in Brisbane 2012.

Representatives commented that IGC bidding 8 years ahead was too long and proved to be unrealistic due to too many unpredictable conditions. RO proposed that he would come up with a motion to the IUGS-IGC Council during the 35th IGC that the IGC bidding would be reduced to 4 years ahead.

#### **17. Next EC meeting**

JPC introduced that the next EC meeting (Outgoing) would be held during the 35th IGC in Cape Town on August 26-27, 2016 before the Opening Ceremony of the IGC, and the Handover (Incoming) EC meeting would be held on September 2, 2016 after the IUGS-IGC Council meeting (August 31 and September 1, 2016). It was reminded that the participants in the incoming EC meeting shall be notified of the time and venue of the meeting beforehand so as to secure a smooth transition between the outgoing IUGS EC and the new EC.

## ACTIONS LIST FROM THE 69<sup>th</sup> Executive Committee Meeting

Action Item	Responsible Person	Description of Action Item	Deadline	Status
EC69_Action_01	Roland Oberhansli	Roland Oberhansli to send formal letter of thanks to their meeting hosts.	30/1/2016	
EC69_Action_02	Secretariat	With consultation with Edmund Nickless and Roland Oberhansli, Secretariat to send a new revised call to IUGS Adhering Organizations, Commissions, Task Groups and Affiliated Organizations regarding involvement in Resourcing Future Generation.	30/4/2016	
EC69_Action_03	Roland Oberhansli	Roland Oberhansli to send a letter to ICSU, in reaction to the proposed new voting rules – IUGS does not agree with this proposed changed and will consider dissolving its membership to ICSU.	30/1/2016	
EC69_Action_04	JP Calvo	JP Calvo to send call for ICSU Grant Application 2018 to the entire geological community (Affiliated, Commissions, Task Groups etc.). IUGS as Scientific Union can serve as leading applicant.	30/01/2016	
EC69_Action_05	Roland Oberhansli	Roland Oberhansli to write S. Finney to inform him that the EC unanimously agreed to the dissolution and the rebuilding of the Precambrian Subcommission.	30/1/2016	
EC69_Action_06	Roland Oberhansli	Secretariat/Amel: Encourage all IUGS Commissions, Task Groups, Joint Programmes, IGCP Projects, Affiliated Originations will be to send photos and text for Social Media and Webpage and Bulletin (key products, congresses, awards, etc.)	29/2/2016	
EC69_Action_07	Roland Oberhansli	In response to Stan Finney's motion to ICS reconstitute Commission on Precambrian, Roland Oberhansli to write a letter to Stan Finney indicating EC approval, which is pending Council approval.	30/01/2016	
EC69_Action_08	Secretariat	The Secretariat on behalf of the EC to send letters of thanks to all presenters.	30/1/2016	
EC69_Action_09	Amel Barich	Amel Barich to replace Amaury Pourteau as IUGS Bulletin Editor.	30/1/2016	
EC69_Action_10	Roland Oberhansli	Roland Oberhansli to inform Brian Marker that Amel Barich will serve as Bulletin compiler for the remainder of her term.	30/1/2016	
EC69_Action_11	JP Calvo	JP Calvo to send Amaury Pourteau acknowledgement and thanks for his work with the IUGS e-Bulletin.	30/1/2016	

EC69_Action_12	Roland Oberhansli	During the incoming EC meeting (handover) participants should be informed that the next Finance Committee (2016-2020) should be put in soon as possible (as per 2012 Strategic Plan).	30/7/2016	
EC69_Action_13	JP Calvo	JP Calvo to contact Mapani to ask for the Terms of Reference (ToR) for the new IUGS Initiative named New Activities, Human activities and Geoenvironment, as well as a list of officers of the new Initiative. To be included in Council documentation (no ratification required).	30/01/2016	
EC69_Action_14	JP Calvo	JP Calvo to contact Wang Xueqiu requesting the ToR Reference for an IUGS Commission Global Geochemical Baselines and the list Officers of the Commission.	29/02/2016	
EC69_Action_15	Roland Oberhansli	Roland Oberhansli to write to both leaders of the Task Group and request a formal ToR Reference for a combined group Commission on Geoheritage, and list officers, to be approved by EC and then ratified by Council.	29/02/2016	
EC69_Action_16	JP Calvo	JP Calvo to respond to Alison Ord, informing that no funds will be allocated for 2016, and list all issues raised by the EC (Geodynamics, too narrow geographically focused). Contact Y. Dilek to assist with this correspondence.	29/02/2016	
EC69_Action_17	Secretariat	Secretariat to find ToR for Tectask.	29/02/2016	
EC69_Action_18	Roland Oberhansli	Roland Oberhansli to write to Ogawa-san to encourage him to come with full proposal, officers, broader – all hazards. EC approves creation the Task Group. Would like to see this for the EC.	29/02/2016	
EC69_Action_19	Roland Oberhansli	Roland Oberhansli write Edmund to request a proposal for an IUGS Initiative on RFG, in time for the next EC.	30/02/2016	
EC69_Action_20	JP Calvo	JP Calvo to inform Barry Cooper that INHIGEO statutes ratified by the EC.	29/02/2016	
EC69_Action_21	Dong Shuwen and JP Calvo	JP Calvo will ask Dong Shuwen for final allocation of funding and will contact IUGS bodies to inform to them about EC decisions.	29/02/2016	
EC69_Action_22	JP Calvo	JP Calvo (Affiliated Organizations) and Roland Oberhansli (Nominating committee, Gender) to send statutes revision (showing old and new) and rationale to the full EC, before including in Council documentation for approval.	29/02/2016	
EC69_Action_23	Yildirim Dilek	Yildirim Dilek will send South Korea Geological Society Chair the Mission of Episodes and conditions for taking on Episodes.	30/01/2016	

EC69_Action_24	Secretariat	IUGS Secretariat to find the latest ToR for IUGS Publications Committee and forward to the EC.	30/01/2016	
EC69_Action_25	Yildirim Dilek	Yildirim Dilek will mediate Executive Committee email discussion on the issue of reforming the Publications Committee.	30/01/2016	
EC69_Action_26	Yildirim Dilek	Yildirim Dilek will send a copy of a revised MoU for Episodes to Korea as soon as possible, but pointed out to the EC that these will be adapted to suit the new Episodes office.	30/01/2016	
EC69_Action_27	Roland Oberhansli	Roland Oberhansli to contact Brian Marker that Yildirim Dilek will be in contact with him regarding the new Episodes Editorial officer.	30/01/2016	
EC69_Action_28	Yildirim Dilek	Yildirim Dilek will contact Brian regarding the possible transfer of Episodes to South Korea	29/02/2016	
EC69_Action_29	Anne Liinamaa-Dehls	IUGS Secretariat to deal immediately contact information matters to the domain www.iugs.org.	30/01/2016	
EC69_Action_30	Secretariat	Secretariat will take actions required to get the online registration for council by 29th February.	29/02/2016	
EC69_Action_31	Secretariat	Secretariat to coordinate the 10 free EC registrations, including Bureau, Jacques Charvet. IUGS pays for Brian Marker, Peter Bobrowsky (and William Cavazza).	08/02/2016	
EC69_Action_32	Secretariat	IUGS Secretariat to send list to Crystal at Africa Allevents for registering IUGS officer.	08/02/2016	
EC69_Action_33	Secretariat	IUGS Secretariat to contact Crystal at Africa Allevents for suggestions for 3 hotels that could be used by IUGS.	08/02/2016	
EC69_Action_34	Secretariat	IUGS Secretariat to contact Crystal regarding invoicing Secretariat for 10 hotel payments.	08/02/2016	
EC69_Action_35	Secretariat	IUGS Secretariat to send the draft call to IUGS Affiliated Organizations to special meeting to JP Calvo (30/8/2016).	08/02/2016	
EC69_Action_36	JP Calvo	JP Calvo to send out Call to IUGS Affiliated Organizations to come to special meeting.	08/02/2016	
EC69_Action_37	JP Calvo	JP Calvo and Roland Oberhansli to discuss with Laurence Robbs regarding fitting in the awards in Plenary Meetings.	08/02/2016	
EC69_Action_38	Secretariat	IUGS Secretariat to remind IUGS Bodies of the free meeting rooms for Business Meetings available from 6-8 pm at the Congress Venue.	30/4/2016	
EC69_Action_39	Secretariat	IUGS Secretariat to draft letter for Secretary General which will go out to leaders of IUGS Commissions, Task Groups, etc. requesting content	30/03/2016	

		for posters, specifying image resolution 300dpi, length text (max 500 words), and logo (if available)		
EC69_Action_40	Secretariat	Secretariat to design posters for booth to be discussed during Bureau and distributed to leaders for comments.	30/4/2016	
EC69_Action_41	JP Calvo	JP Calvo to contact the same groups and encourage them to contribute material for posters, website and social media.	30/2/2016	
EC69_Action_42	JP Calvo	JP Calvo to contact IUGS officers for highlights of activities in 2015. This should be short.	28/1/2016	
EC69_Action_43	JP Calvo	JP Calvo to inform ICS of that their allocation is listed USD 50,000 pending an itemized budget or use of funds.	28/1/2016	
EC69_Action_44	JP Calvo	JP Calvo to inform IFG the response to the allocation to their group will be announced is pending review.	28/1/2016	
EC69_Action_45	R. Oberhansli and JP Calvo	R. Oberhansli and JP Calvo to contact Greg Botha regarding Exhibition costs.	28/1/2016	
EC69_Action_46	Roland Oberhansli	EC (SG) to send a letter of thanks to MLR (China) for its support of the Secretariat.	02/03/2016	
EC69_Action_47	Roland Oberhansli	Roland will contact Greg Botha that South Korea invited people for inspection.	25/02/2016	
EC69_Action_48	Roland Oberhansli	Roland Oberhansli to contact Germany, Turkey, Russia that they welcome an invitation for inspection.	25/02/2016	