Summary of the Fourth Meeting of the IAG EC 2011-2015

Place: Techn. University, Inst. Geodäsie & Geophysik, Gusshausstr. 27-29, Vienna, Austria

Time: Sunday, April 7, 2013, 09:00 – 17:00

Attendees (voting): Ch. Rizos (IAG President), H. Schuh (IAG Vice-President), H. Drewes (IAG Secretary General), M. Sideris (Immediate IAG Past President), T. van Dam (President Commission 1), U. Marti (President Commission 2), J. Ádám (President of the COB), R. Barzaghi, T. Herring (Representatives of the Services)

Attendees (non-voting): N. Sneeuw (ICCT President), G. Beutler (Past President), H. Hornik (IAG Assistant Secretary)

Guests: P. Wielgosz (Commission 4 substitute), R. Klees (Editor in Chief of J. of Geodesy)

Regrets: R. Gross (President Commission 3), D. Grejner-Brzezinska (President Commission 4), H. Kutterer (Chair of GGOS), R. Neilan (Representative of the Services), C. Brunini, R. Wonnacott (Members at Large)

Summary of Agenda Items:

1. Welcome and Adoption of Agenda

Ch. Rizos welcomed the members of the IAG Executive Committee (9 out of 15 voting members, 3 non-voting members and 2 guests). The meeting took place on occasion of the EGU General Assembly, Vienna, April 7-12, 2013. The agenda had been distributed previously by e-mail and was unanimously adopted after the inclusion of a marginal additional topic (see 18. AOB).

2. Organisational reports of the IAG Scientific Assembly, Potsdam 2013

H. Schuh, as the chairman of the LOC, reported on the organisational arrangements for the Assembly (venue, locations, etc.). He recommended reserving accommodation soon because the capacity in Potsdam is rather limited. But also Berlin offers plenty of suitable hotels and the connection by public traffic is good. *Ch. Rizos* proposed putting a map on the Website.

The scientific programme is divided into 6 themes, i.e.

- 1. Definition, Implementation and Scientific Applications of Reference Frames
- 2. Gravity Field Determination and Applications
- 3. Observing, Understanding and Assessing Earth Hazards
- 4. Science and Applications of Earth Rotation and Dynamics
- 5. Observation Systems and Services
- 6. Imaging & Positioning Techniques and Applications

The schedule is arranged such that in general three parallel sessions will be held, except during the opening, closing and historical sessions. In the historical session on Wednesday, September 4, three review contributions highlighting the past 150 years will be presented by *W. Torge, C. Boucher* and *I. I. Mueller*. Details may be seen at http://www.iag2013.org.

Ch. Rizos referred to the SOC arrangements. There were some changes in the convenors list which have to be put on the Webpage. He reminded the convenors to think about the invited talks. As we are celebrating the 150th anniversary, there should be at least one paper on historical developments in each theme. Other speakers may be invited.

H. Drewes urged the convenors to do the attribution to oral or poster presentations only according to their suitability, not according to some measure of quality (posters are not necessarily worse). For the submission of abstracts a fee has to be paid. This fee will be deducted from the registration fee, however only one per author. He informed the EC that about ten IAG Travel Awards can be granted. IUGG is also providing financial support.

Ch. Rizos said that the IAG EC will meet, as usual, on the occasion of the IAG Scientific Assembly. The meeting is scheduled for the day before the opening, i.e. Sunday, September 1, whole day. A meeting of the IAG Council will be held on Tuesday, September 3, 6-8 pm.

3. IAG Mid-term reports (Travaux de l'AIG)

H. Drewes stated that the mid-term reports are imperative in order to verify that all groups of the IAG structure are working. This will be done at the EC meeting in Potsdam. The reports should be written in a way that the important activities and the progress in the corresponding field are documented. Non-active groups will be dissolved by the EC. The Component Presidents (Commissions, ICCT, Services, GGOS, and COB) have to prepare the complete report including information on all sub-components. The deadline for submission is July 1, 2013. In order to organise the work efficiently, the IAG Office distributes templates of the format and style. The final report is published on the Website before September. After adoption it will be distributed to the IAG Council (also in a printed version).

4. Reports of the Commissions

T. van Dam stated that almost all groups within the Commission 1 "Reference Frames" are working well. In continuation of the Commission Symposia 2006 in Munich and 2010 in Paris, another Symposium is planned for 2014 in Luxembourg. On this occasion the work of Commission 1 will be presented in detail. She then presented the activities of the Subcommissions and Joint WGs. H. Drewes encouraged T. van Dam to announce the planned symposium a.s.a.p. because there will be a COSPAR Meeting in August 2014 in Moscow. Although the topics of COSPAR are more space orientated, the programmes might have similar topics and overlaps could occur. As IAG Commission 1 is identical with COSPAR Sub-commission B2 and COSPAR is a Commission of ICSU, these meetings are important to advertise the work of the IAG within the ICSU community.

U. Marti reported on some minor organisational changes within the Commission 2 "Gravity Field". Among several meetings the main event in the last period was the Gravity, Geoid and Heights Systems (GGHS2012) Symposium in Venice, October 9-12, 2012 (140 participants, 89 oral presentations and 64 posters available at Commission 2 webpage if the author's permission has been given, proceedings in the Springer Series in preparation). Moreover, he presented an overview of the coming events till the next IUGG General Assembly, especially the joint Symposium with the IGFS, in Shanghai, autumn 2014. He informed the EC about a project on geoid determination in Africa (sponsored by IUGG, together with IASPEI). Finally *U. Marti* asked the question whether IAG should have a representative in the BIPM Consultative Committee for Mass and Related Quantities (CCM) like IUGG has it in the Consultative Committee for Time and Frequency (CCTF).

H. Schuh gave an overlook on activities of Commission 3 "Earth Rotation and Geodynamics" by slides of *R. Gross* mentioning in particular the past and coming symposia. The next event is the 17th International Symposium on Earth Tides, Warsaw, Poland, April 15-19, 2013. The Journées 2013 "Systèmes de référence spatio-temporels" will be held in Paris, France,

September 16-18, 2013. The Journées are co-sponsored by the IAU. *H. Drewes* informed the EC on the request to IAG to co-sponsor it (see Agenda Topic 15). The International Symposium "Reconciling Observations and Models of Elastic and Viscoelastic Deformation due to Ice Mass Change", Ilulissat, Greenland, May 30-June 02, 2013, is co-sponsored by the IAG. The activities of Sub-commissions, the Joint Study Group and Joint Working Group were then highlighted. A new Joint Working Group of IAU and IAG on "Theory of the Earth Rotation" was proposed (see Agenda Topic 5).

P. Wielgosz presented the report of Commission 4 "Positioning and Applications" acting for *D. Brzezinska*. There were several symposia and workshops in 2012 organised or sponsored by the Commission, and there are many conferences, symposia, and workshops planned in 2013. He then explained in detail the results and planned activities of the Sub-commissions with new SGs and WGs. Concerning the installation of three new WGs and one new SG, *H. Drewes* requested the Commission to submit a detailed overview on the formation as well as the ToR. The EC has then to decide on the adoption of these groups.

Summarising the Commissions' reports, *H. Drewes* requested all Commissions to submit important information on the activities and meetings to the Secretary General for compiling the meetings calendar and the annual report to the IUGG. *J. Adam* asked all colleagues to consider the monthly IAG Newsletter and to send all relevant information to the IAG COB to be published in this periodical. Especially for all IAG symposia and conferences a short report should be delivered to inform the international community on the activities.

5. Adoption of new Working Group 3.1 "Theory of the Earth Rotation"

The draft ToR for this new Joint Working Group of IAU and IAG had been posted on the IAG Office Homepage previous to the EC meeting. *H. Schuh* explained that within the recent decade the theory has been revised, nevertheless the progress turned out to be not sufficient. In order to promote the development, three Sub-Working Groups (Precession/Nutation, Polar Motion and UT1, Numerical Solutions and Validation) have been installed. *H. Drewes* moved for adoption of the WG, *Ch. Rizos* seconded, and the EC adopted the new Sub-WGs under the condition, that IAG is correctly mentioned in all aspects especially when products are issued.

6. Report of the ICCT

N. Sneeuw reported the VIII Hotine-Marussi Symposium to be held in Rome, June 17-21, 2013. Altogether 85 abstracts have been submitted to be presented in the 8 sessions. *H. Schuh* recommended watching the dates of all symposia so that they do not overlap with other events. Concretely he proposed to shift the Hotine-Marussi Symposia to the even years in order to separate them from the General Assemblies in the odd years. *N. Sneeuw* agreed, announcing that the next Hotine-Marussi Symposium will then take place in three years; afterwards the period is planned for each 2 years.

7. Report of the GGOS

By slides of *H. Kutterer*, *H. Schuh* reported on the progress of GGOS. All structure components within GGOS have now been established and elections have been finalised. The main entities of the structure are the Consortium, the Coordinating Board and the Executive Committee. The Consortium meets annually, the CB semi-annually, and the EC monthly by telephone conferences. The GGOS 2020 Project is a central activity, the timeline was conceptually fixed. GGOS 2020 is proposed to be a System of Systems. Another important

activity is within the UN GGIM, where in February 2013 the Doha declaration was released. *H. Schuh* said that GGOS has organised a Unified Analysis Workshop and other activities which are indeed useful. It was recommended to improve the GGOS homepage especially to give more clear information also to visitors who are not intensively engaged in Geodesy.

8. Report from the Services

R. Barzaghi reported on the Services BGI, IGFS, IGES, ICGEM, ICET and IDEMS. The structure of the IGFS has changed in some aspects and a new chairman, R. Barzaghi, has been elected. The IGES will submit a proposal for a restructuring to be discussed in Potsdam. The next Geoid School will be held in October 2013 in Loja, Ecuador. Future events are foreseen in Trieste in 2014, and contacts with the University of Cairo have started to organise a further event. The situation of the IDEMS is unfortunately still rather annoying. The EC congratulated R. Barzaghi on his election as IGFS Chairman. On the question of J. Adam concerning the plans to install a new Service for absolute gravity, R. Barzaghi answered that this work should be done by the BGI where the relevant data could be appropriately stored.

T. Herring gave a summary report on the BIPM, IERS, IVS, IBS and PSMSL. A. Nothnagel has been elected recently as the new Chair of the IVS Directing Board. The IBS seems no longer to be active. H. Drewes explained that BKG is discontinuing the IBS and there is a suggestion to transfer it to the COB. J. Adam answered that this transfer might be difficult due to the lack of personnel.

9. Report of the COB

J. Adam reported that the monthly IAG Newsletter is distributed among about 900 addressees. The complete version is sent by e-mail, a reduced version is submitted for publication in the Journal of Geodesy. The IAG Website is visited by 60 to 70 users per day. The COB and IAG Office have met in Budapest in November 2012 to discuss the IAG Website, the Potsdam Assembly and the Geodesist's Handbook. H. Drewes added that the 2012 Geodesist's Handbook has been distributed among the IUGG EC, further together with the IAG 2009 Scientific Assembly to all IAG National Correspondents. The price for these publications is rather high and numerous colleagues, especially in developing countries cannot afford to buy these issues. Moreover H. Drewes strongly recommended improving the IAG Website so that it is less overcrowded and making it more attractive, especially for non-geodesists.

10. Editor's Report of the Journal of Geodesy

R. Klees remembered the conclusion of the 2011 Melbourne session to reduce the number of members of the JoG Editorial Board. Consequently the Board comprises now altogether 15 persons. The number of submitted articles is rather constant over the last three years; however, an increasing number of articles are rejected. It turned out that a number of rejected articles are later submitted to other journals and published there without any revision. He claimed that especially the rejected articles as well as those which are principally accepted but have to be revised by the authors cause enormously much work for the Editorial Board. Therefore it had been concluded in Melbourne to allow only one revision, if the paper then is not yet sufficient it will be rejected. Although the members of the Editorial Board try to handle their workload as efficiently as possible, the average time span between the first submission of an article and the final acceptance is rather long; moreover the editing time is considerable. Despite many attempts to accelerate the publication process, the time span till

the digital publication is still about 140 days, for the publication as the printed version even about 400 days, i.e. more than one year.

11. Young Author's Awards 2011 and 2012

R. Klees informed the EC that all articles coming into consideration have been checked and a large number of proposals been submitted. Finally four articles have been selected, one for the year 2011 and three for 2012. The relevant texts can be downloaded from the IAG Office Website. It is up to the EC to add further articles if it would seem reasonable. H. Drewes pointed out that according to the "Rules for the IAG Young Authors Award" the price may be awarded once per year if adequate candidates are nominated. The list of the winners is published in the Journal of Geodesy. Seconded by Ch. Rizos, H. Schuh moved to accept the only one proposed article for the year 2011 immediately. The EC accepted unanimously. Further it was decided to vote via internet on the selection of the 2012 awardee.

12. Status Report of the Cassinis Committee

M. Sideris informed the EC that the Committee has discussed the IAG Statutes and Bylaws intensively and worked out a list of proposed changes in the texts. The IAG Office will distribute the texts among the IAG Council Members to be prepared for the discussion in Potsdam. Based on this discussion final proposals will be worked out to be concluded at the next IUGG General Assembly in Prague 2015. As a topic for the next EC Meeting N. Sneeuw proposed to recommend officially the continuation of the ICCT and further to include the ICCT President into the circle of voting members. According to the other bodies the time period of the President should then be limited to two periods.

13. Report on the IAG Symposia Series

Ch. Rizos presented slides of *P. Willis* giving an overview of the volumes of the IAG Symposia Series recently published and in preparation or planning. The ranking is quite high but some proposals for improvement were made. For the volume of the Melbourne General Assembly altogether 109 articles have been submitted, 80 of them accepted for publication. In order to keep a high ISI factor of the series, *U. Marti* emphasised that the highest quality for all published articles should be maintained although the rejection rate is already high.

14. Review of Services

H. Schuh gave an overview on the general structure and duties of the IAG Services. § 15 of the IAG Bylaws defines the tasks. The Services are rather free in defining their structure and work plans as far as compatible with the aims of the IAG. Some Services are together with the IAU. The history of the Services is rather inhomogeneous, several ones have been founded in the recent past, others however are based on institutions which partly have been founded already at the end of the 19th / beginning of the 20th century. He pointed out that up to now the Services never have been evaluated concerning their efficiency as a backbone of the IAG or whether they fulfil their task in contributing to the GGOS. A time schedule for an evaluation as well as the procedure was presented. The core evaluation group should comprise 4 – 5 persons with strong involvement in GGOS, 2 – 3 referees for each Service (including "cross-referees") then should be nominated. Basing on their findings the future structure of the Services should be discussed at the IUGG General Assembly in Prague 2015. In case of need structures should be improved or, if it turns out that a Service absolutely does not fulfil its tasks, even be dissolved. In the discussion it was interjected that all Services are based on

voluntary contributions. It might be more efficient to ask external referees to review the Services. In particular the long term work of the Services can be investigated. Moreover it has to be considered carefully that the IAG just cannot dissolve some Services as they may be governmental organisations or/and joint ventures. Finally the EC established a group consisting of *H. Schuh*, *H. Drewes*, *R. Barzaghi*, *T. Herring and R. Neilan* to handle this task and report to the Potsdam Assembly. They should define the goals and criteria, and prepare the Services for the evaluation exercise.

15. Adoption of IAG (sponsored) Symposia

H. Drewes presented a list of upcoming IAG Symposia (see http://iag.dgfi.badw.de under "Meetings Calendar"). The EC approved the complete list.

16. IAG Representative to the Advisory Board on the Law of the Sea (ABLOS)

Ch. Rizos and H. Drewes explained that ABLOS is a joint Board of IAG and IHO. It represents an important institution treating questions on the definition of boundaries of maritime zones. Up to now the IAG representatives in ABLOS were S. Bisnath (Canada), G. Blick (New Zealand), S. Sutisna (Indonesia) and N. Andersen (Sweden). Recently S. Bisnath has been elected President of ABLOS, so he has to be replaced in his function as a representative. J. C. Baez, Concepción/Chile has been nominated. H. Drewes moved to approve this nomination, Ch. Rizos seconded, and it was unanimously adopted by the EC.

17. Next IAG EC meeting

The next EC meeting has to be held during the Scientific Assembly (September 2-6, 2013). The EC agreed to schedule the meeting for Sunday, 1st September, over the whole day.

18. Any other business

U. Marti informed the EC that he and several other colleagues have received an invitation to become members of the Advisory Editorial Board / Section Editors Board for the planned edition of an "Encyclopaedia Geodesia". The plan has been initiated by *E. Grafarend* (editor) and *P. v. Steenbergen* (Springer Publishing House). The Encyclopaedia should comprise about 200 articles on geodesy which are to be delivered by the end of 2014. The EC decided unanimously that this is not a responsibility of the IAG EC.

19. Adjourn

Ch. Rizos thanked the participants for their contributions and closed the session at 17:15.

Respectfully submitted H. Drewes, Secretary General H. Hornik, Assistant Secretary