

Summary of the Third Meeting of the IAG EC 2015-2019

Place: Potsdam, Germany, GFZ German Research Centre for Geosciences, A17

Time: Monday, April 25, 2016, 09:00 – 16:45

Attendees (voting): H. Schuh (IAG President), Z. Altamimi (Vice President), H. Drewes (Secretary General), C. Rizos (Immediate Past President, occasionally via Skype), G. Blewitt (President of Commission 1), R. Pail (President of Commission 2), M. Hashimoto (President of Commission 3), M. Santos (President of Commission 4), P. Novák (President of ICC on Theory), H. Kutterer (Chair of GGOS), J. Adam (President of COB), R. Barzaghi, R. Neilan (occasionally via Skype), A. Nothnagel (Representatives of the Services), L. Combrinck, M.C. Pacino (Members at Large)

Attendees (non-voting): G. Beutler (IAG Past President), F. Kuglitsch (Assistant Secretary)

Guests: J. Kusche (Editor in Chief of the Journal of Geodesy), S. Rózsa (Secretary of COB), A. Craddock, R. Gross (during agenda points 14-19)

Summary of Agenda Items:

1. Welcome and adoption of agenda

The 3rd IAG EC Meeting in the term 2015-2019 took place on 25 April 2016, at the GFZ German Research Centre for Geosciences in Potsdam, Germany, right after the EGU General Assembly 2016 in Vienna, Austria. The agenda was distributed previously by email and was unanimously adopted. *H. Schuh*, the President of the IAG, welcomed the members of the IAG Executive Committee (15 out of 16 voting members, 2 non-voting members and 2 guests), and in particular *G. Beutler*, IAG President 2003-2007 and moderator of the IAG Retreat on 26 April 2016. The EC Members approved the minutes of the second EC Meeting in San Francisco, USA, in December 2015.

2. Final structure 2015-2019 of the Commissions

G. Blewitt gave the presentation on **Commission 1**. He reported about the ToR, the objectives, and the structure of the Commission including its Sub-commissions, Joint Working Groups and the Steering Committee. The website of Commission 1 is hosted by the Vienna University of Technology (<http://iag.geo.tuwien.ac.at>). In the term 2015-2019, Commission 1 will have 4 Sub-commissions: Sub-commission 1.1 (Coordination of Space Techniques; chaired by *U. Hugentobler*), Sub-commission 1.2 (Global Reference Frames; chaired by *X. Collilieux*), Sub-commission 1.3 (Regional Reference Frames; chaired by *C. Bruyninx*), and Sub-commission 1.4 (Interaction of Celestial and Terrestrial Reference Frames; chaired by *Z. Malkin*). The ToR of the Working Group 1.4.3. “Improving VLBI-Based CRF for Geodesy” and the role of the IAU should be clarified. *H. Drewes* suggested adding a link to COSPAR in the objectives of Sub-Commission 1.1.

R. Pail gave the presentation on **Commission 2**. He reported about the activities since December 2015, the main tasks in the term 2015-2019, and the structure of the Steering Committee, the Sub-Commissions, Working Groups and Study Groups. The website of Commission 2 is hosted by the Technical University of Munich (<http://alpha.fesg.tu-muenchen.de/IAG-C2/>). In the term 2015-2019, Commission 2 will have 6 Sub-commissions: Sub-commission 2.1 (Gravimetry and Gravity Networks; chaired by *L. Vitushkin*), Sub-commission 2.2 (Methodology for Geoid and Height Determination; chaired by *J. Agren*), Sub-commission 2.3 (Satellite Gravity Missions; chaired by *A. Jäggi*), Sub-commission 2.4

(Regional Geoid Determination; chaired by *M.C. Pacino*), Sub-commission 2.5 (Satellite Altimetry; chaired by *X. Deng*), Sub-commission 2.6 (Gravity and Mass Transport in the Earth System; chaired by *J. Kusche*). GGHS-2016, a joint meeting with IGFS, will be organized from 19-23 September 2016, in Thessaloniki, Greece. *H. Drewes* suggested renaming Sub-commission 2.2 to avoid the term “Determination”. Also, it should be clarified to which Sub-commission a Working or Study Group reports to.

M. Hashimoto gave the presentation on **Commission 3**. He reported about the role of the Commission, its objectives, structure incl. Sub-commissions, joint Study and Working Groups, the Steering Committee and activities. Commission 3 has 5 Sub-commissions: Sub-commission 3.1 (Earth Tides and Geodynamics; chaired by *J. Bogusz*), Sub-commission 3.2 (Crustal Deformation; chaired by *Z.-K. Shen*), Sub-commission 3.3 (Earth Rotation and Geophysical Fluids; chaired by *J. Chen*), Sub-commission 3.4 (Cryospheric Deformation; chaired by *S. A. Khan*), and Sub-commission 3.5 (Tectonics and Earthquake Geodesy; chaired by *H. Ozener*). *H. Schuh* mentioned that there is the GGOS focus area “Sea-level Change” which is chaired by *T. Schöne* that should be closely linked to the joint Working Group 3.2.

M. Santos gave the presentation on **Commission 4**. He reported about the structure and the activities of the Commission. The website of Commission 4 is hosted by the University of New Brunswick (<http://IAG-Comm4.gge.unb.ca>). He mentioned that there will be 4 Sub-commissions in the term 2015-2019: Sub-commission 4.1 (Emerging Positioning Technologies and GNSS Augmentation; chaired by *V. Gikas*), Sub-commission 4.2 (Geo-Spatial Mapping and Geodetic Engineering; chaired by *J. W. Wang*), Sub-commission 4.3 (Atmosphere Remote Sensing; chaired by *M. Schmidt*), and Sub-commission 4.4 (Multi-Constellation GNSS; chaired by *P. Wielgosz*). Also, he mentioned that Commission 4 will have a “Positioning and Applications” from 4-7 September 2016 in Wroclaw, Poland. *H. Schuh* noted to clarify if GNSS-R is also still under GGOS. *M. Santos* mentioned that low-cost sensors for using cell phones are considered by Sub-commission 4.1.

3. Final structure 2015-2019 of the Inter-Commission Committee on Theory

P. Novák gave the presentation about the structure and activities of ICCT. He clarified that all of the 13 study groups are jointly organized with one or more Commissions and have their ToRs ready. The website of ICCT is hosted by the University of West Bohemia (<http://icct.kma.zcu.cz>). He highlighted the involvement of early-career scientists in the study groups, and the Hotine-Marussi Symposium will be organized in 2018. *Z. Altamimi* noted that the work done by study groups is very relevant for the IAG Services. *P. Novák* agreed asking the study group chairs about developing stronger links to the Services (e.g. in form of Service Representatives). *H. Schuh* emphasised the importance of the joint study group on “Space weather and ionosphere” and suggested adding more than 8 members to this study group.

4. Final structure 2015-2019 of the Communication and Outreach Branch

J. Adám, gave a presentation about the ToR, the structure and the activities of COB. He underlined the need to get regularly news/input for the IAG website and the IAG newsletter. Also, he mentioned that the IAG Brochure and booklet have been updated and are now available on the IAG website (<http://www.iag-aig.org/>). He asked the EC to approve the Steering Committee composed according to the IAG Bylaws by *J. Adám*, *H. Drewes*, *J. Kusche*, *J. Freymueller*, *S. Rózsa*, *G. Tóth*, *F. Kuglitsch*, and *A. Craddock*. The EC approved the members of the Steering Committee unanimously. *H. Schuh* clarified that *C. Rizos* will no longer submit the reports to GIM International but the COB will do so. However, *C. Rizos*

will still be acting as editor of the text, if required. The scheduling of the monthly report submissions should be mainly organized by the COB.

5. Final structure 2015-2019 of GGOS

H. Kutterer gave the presentation on the structure of GGOS. He reported about the objectives, representatives, working groups, Consortium Coordinating Board and Executive Committee of GGOS. The website of GGOS is hosted by BKG (www.ggos.org). He mentioned that it is a good time now to re-start GGOS activities with GEO.

6. Reports of the Services

R. Barzaghi gave the presentation about the programmes of the International Gravity Field Service (IGFS) and the gravity related services: Bureau Gravimetric International (BGI), International Service for the Geoid (ISG), International Centre for Global Earth Models (ICGEM), International DEM Service (IDEMS), and International Geodynamics and Earth Tides Service (IGETS). He mentioned that the new IGFS Central Bureau started its activities in April 2016 at the University of Thessaloniki (<http://igfs.topo.auth.gr/>).

A. Nothnagel gave a presentation about the Bureau International des Poids et Mesures (BIPM), International Earth Rotation and Reference Systems Service (IERS), International VLBI Service for Geodesy and Astrometry (IVS), and Permanent Service for Mean Sea Level (PSMSL),

7. Reports from developing countries

L. Combrinck gave a presentation about Geodesy in Africa. He noted that Botswana and Madagascar would be best countries in terms of stability and reliability to collaborate with. *M.C. Pacino* gave then a presentations about (1) geodetic activities in South America and (2) the Argentinean-German Geodetic Observatory. *H. Schuh* noted that this agenda point should be called “Reports of the Members at Large” in future.

8. Status of the Geodesist’s Handbook 2016

H. Drewes reported that not all the reports for the Geodesist’s Handbook 2016 are available yet. He asked the EC Members to check the available documents in May before the final technical edits are made by the IAG Office (*H. Drewes, F. Kuglitsch*) and the COB (*J. Adam, S. Rózsa*). Also, he requested to get all new URLs of the commissions, and ICCT, GGOS and services if changed.

9. Status of the Prague proceedings

H. Schuh summarized the report about the Status of the Prague proceedings, prepared by *J. Freymueller* and *L. Sanchez*. He mentioned that it should be clarified how to proceed with the Springer Publications. *H. Schuh* and *H. Drewes* noted that the future focus should be on e-books rather than on printed volumes which are getting less attractive. The EC discussed the following three options suggested by *J. Freymueller* about how to proceed with the e-books:

1. Make the IAG Symposia series a part of the individual membership in the IAG, gaining us a larger readership. This would require an increase in the cost of dues, and the cost/benefit of this needs to be considered. It may be too expensive.

2. Make the Symposia series e-book normally part of the meeting fee for all IAG meetings that intend to produce a symposium volume. This is definitely feasible.
3. Continue as now, with the volume available for sale to those who choose to buy it.

H. Drewes noted that in principle IAG could offer e-books with open access (on average 2 per year) but then other expenses of IAG (mostly travel awards for early-career scientists) need to get reduced. He mentioned that for the IUGG2015, IAG offered more than 50 travel grants. The EC concluded (i) to negotiate an offer with Springer to get full open access e-books or (ii) to find a way of combining options 1 and 2, offering alternatively e-books to all IAG members or to the participants of the symposia.

10. Status of the Journal of Geodesy

J. Kusche, Editor-in-chief of the Journal of Geodesy, gave his report about the status of the Journal of Geodesy. He noted that a submitted paper to the Journal of Geodesy gets a minimum of three reviewers, and that the acceptance rate very much depends on the originating country of the authors but that the language is never a reason to reject a paper. *H. Schuh* noted that in future it would be good not changing almost the entire Editorial Board but to always keep some experienced people for the phase of transition. He also noted some cases of submissions where there were minor revisions requested after the first review and major revisions after the second review. Such cases should be avoided by the Editor-in-chief.

11. Liaisons with other international and professional bodies

H. Drewes presented the liaisons with other international and professional bodies available at <http://iag.dgfi.tum.de/index.php?id=326>. The IAG representatives to these liaisons as well as to IAG services and IUGG Commissions, Committees and Working Groups are defined by the EC. The current status may be found at http://iag.dgfi.tum.de/fileadmin/IAG-docs/IAG_Representatives_2015.pdf.

12. Position Paper and Road Map on the UN Global Geodetic Reference Frame

H. Schuh reported about the IAG position paper “Description of the Global Geodetic Reference Frame”. He mentioned that the EC approved the paper by electronic voting. *H. Drewes* summarized the result: 9 Yes, 5 No, 1 Abstain. *H. Schuh* reported about his very constructive meeting with the UN GGRF Working Group of the UN-GGIM (co-chair *G. Johnston*) in Vienna, Austria. He mentioned that in the Road Map prepared by the GGRF WG, IAG gets mentioned at least 20 times being responsible for the scientific work. *C. Rizos* suggested him seeing the outcome of this project as a basket or ensemble of various reference systems dealing with geodetic parameters rather than getting a “Super-Frame” that might become reality in the long term future. He further noted that the IAG position paper is an important document which should primarily serve the IAG as a reference document of its own understanding. However, the position paper should not and does not harm the Road Map. Definitely, the Road Map together with its Executive Summary will be a suitable document for UN bodies, policy-makers and the public. A discussion about the purpose and use of the position paper followed.

13. IAG/IASPEI Scientific Assembly, Kobe, Japan, 2017-07-30 to 2017-08-04

M. Hashimoto reported about the venue, committees, schedule and budget of the Assembly. *H. Drewes* mentioned that the Scientific Committee needs to clarify the themes and names of the IAG symposia and the joint symposia. He further noted that IAG members should receive

a discount on the registration fee according to the Bylaws. *R. Pail* suggested organizing a splinter meeting of the four Commission Presidents, the chair of ICCT, the chair of GGOS, a representative of the Services (*R. Barzaghi*) and the IAG Secretary General in the lunch break on 26 April to discuss the Scientific Program.

14. Revision of the IAG Bylaws, appointment of a Review Committee

H. Drewes reported that the IAG Statutes and Bylaws can be modified every four years (at IUGG General Assemblies) and suggested to install a Review Committee (Cassinis Committee) which collects proposed modifications to the IAG Statutes and Bylaws. He noted that usually the Immediate Past President should chair this committee and should propose two committee members. Thus, it was agreed that *C. Rizos* be asked to chair the Committee. The EC approved to install a Review Committee (Motion: *H. Schuh*; 2nder: *H. Kutterer*).

15. Report from IUGG and ICSU

F. Kuglitsch reported about the status of the IUGG Member Countries, new publications, geoscience education events in 2016 supported by IUGG, the IUGG Grants Programme 2016-2019, the new composition of IUGG Union Committees and the IAG Council 2016-2019. *H. Schuh* noted that the next IUGG EC Meeting will be held in June 2016 in Paris, France.

16. Report on the IAG Services Assessment, ISA

H. Drewes reported that all the assessment reports about the Services are available on the IAG Office website. He noted that all the Services have been assessed by three reviewers (among the ISA team) but many services have not responded on the report. The EC members were invited to read the assessment reports and to comment. *H. Schuh* noted that *C. Rizos* will continue being the chair of the ISA team but the procedure should come to an end soon.

17. Any other business

H. Schuh reported about recent GIM International publications informing the public about what IAG is doing.

H. Drewes reminded the EC that according to a decision at the first EC meeting, symposia which are organized by either 1 IAG component or 2 sub-components are considered being approved by the EC. Also he noted that IAG travel awards for presentation at IAG symposia can be requested by early-career scientists being not older than 35 years.

18. Next IAG EC meeting

The EC decided to hold its next meeting, on the occasion of the EGU General Assembly 2017, on 28 April 2017 in Vienna, Austria.

19. Adjourn

H. Schuh thanked the participants for their contributions and closed the session at 16:45.

Respectfully submitted
H. Drewes, IAG Secretary General
F. Kuglitsch, Assistant Secretary General