

## Summary of the Fifth Meeting of the IAG EC 2015-2019

**Place:** Kobe, Japan, Kobe International Conference Center, Room 402

**Time:** Sunday, July 30, 2017, 10:00 – 18:00

**Attendees (voting):** H. Schuh (IAG President), Z. Altamimi (IAG Vice President), H. Drewes (Secretary General), G. Blewitt (President of Commission 1), S. Jin (Vice-President of Commission 2, standing in for R. Pail), M. Hashimoto (President of Commission 3), M. Santos (President of Commission 4), P. Novák (President of ICC on Theory), R. Barzaghi, A. Nothnagel (Representatives of the Services), C. Rizos (IAG Immediate Past President)

**Attendees (non-voting):** M. Sideris (IAG Past President, 2007-2011)

**Guest:** R. Heinkelmann (minute taker)

**Regrets:** R. Pail (President of Commission 2), H. Kutterer (Chair of GGOS), J. Adám (President of the COB), R. Neilan (Representative of the Services), L. Combrinck and M.C. Pacino (Members at Large)

### Summary of Agenda Items:

#### 1. Welcome and adoption of agenda

The 5<sup>th</sup> IAG EC Meeting in the term 2015-2019 took place on 30 July 2017 at the International Conference Center in Kobe, Japan, during the first day of the IAG-IASPEI Scientific Assembly 2017. 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 (10 out of 16 voting members, 1 non-voting member and 1 guest) and introduced *R. Heinkelmann* who represents *F. Kuglitsch* as the minute taker. *F. Kuglitsch* could not attend the meeting due to the birth of his daughter. The EC Members approved the minutes of the fourth EC Meeting in Vienna, Austria, 28 April 2017.

#### 2. Information on the IAG-IASPEI Scientific Assembly, Kobe, 2017

*H. Schuh* invited *H. Drewes* to share his information on the IAG-IASPEI Scientific Assembly, Kobe, 2017. *H. Drewes* reported about the Program Book, the Kobe International Conference Center, and major events happening during the Scientific Assembly. *He* mentioned that the poster sessions will take place in a different building, and that the IAG Strategy Discussion will take place on 3 August 2017, from 18:00-20:00, in Room 402 again.

#### 3. Proceedings of the IAG Symposia; Status of the IAG Series

*H. Schuh* mentioned that the IAG Symposia Series shall be renamed to IAG Topical Series and that IAG will soon have a new contract with Springer International Publishing AG. *He* explained that the major change would be that an article would be published online, one day after it was accepted by the Editor-in-Chief, and that there will be a volume/e-book (not open access) once all articles have got accepted. *H. Drewes* discussed the major points of the new draft contract and highlighted suggestions for revision. *H. Schuh* suggested asking *Dr. Büttner* from Springer International Publishing AG whether it would be possible to pay for a volume in advance (e.g., USD 34), so that one can download all articles which already got accepted immediately and NOT having to wait until all articles have got accepted to access the volume. *He* clarified that one year after publication, an author has the right legally distributing the final version of his/her publication (without Springer logo). *H. Drewes* suggested that the meeting

organizers (LOC) include the publications costs in the registration fees to access the articles. *He* further noted that a minimum of 100 copies have to be ordered. IAG will not cover the costs except for General/Scientific Assemblies proceedings.

#### 4. IAG mid-term reports (Travaux de l'AIG) of Commissions and ICCT

*H. Drewes* presented an overview of the IAG mid-term reports he has received so far (all the reports except for IGS). *H. Drewes* further mentioned that the “Joint Board of GIS” was renamed to “UN-GGIM: Geospatial Societies”. *He* noted that the mid-term reports also serve to identify bodies that are actually not working and therefore should be discontinued. All the reports may be found at <https://iag.dgfi.tum.de/en/iag-publications-position-papers/>.

*G. Blewitt* gave a summary presentation about the mid-term report of **Commission 1**. *He* reported about the work of the four Sub-commissions: Sub-commission 1.1 (Coordination of Space Geodetic 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 Terrestrial and Celestial Reference Frames; chaired by *Z. Malkin*), and the (Joint) Study/Working Groups during the reporting period 2015-2017. *He* further mentioned that the next meeting on Reference Frames for Applications in Geosciences (REFAG) will take place during the COSPAR Assembly between 14 and 22 July 2018, in Pasadena, CA, USA. *He* noted that WG 1.2.1 (Offset Detection in Geodetic Coordinate Time Series) is to be dissolved. The EC approved the termination of the WG 1.2.1, but is still considering this an important topic. A similar working group should be re-established as soon as possible. *G. Blewitt* suggested making a connection to a study group within ICCT. *H. Drewes* noted the importance of being active within COSPAR. *C. Rizos* mentioned that the COSPAR Assembly 2020 will be organized in Sydney, Australia.

On behalf of *R. Pail*, *S. Jin* gave a summary presentation about the mid-term report of **Commission 2**. *He* reported about the work of the six 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*), and the (Joint) Study/Working Groups during the reporting period 2015-2017. *He* further announced the IAG Workshop: Satellite Geodesy for Climate Studies, Bonn, Germany, 19-21 September 2017, and the Second Joint Commission 2 and IGFS Meeting – International Symposium on Gravity, Geoid and Height Systems 2018, Copenhagen, Denmark, 17-21 September 2018. The EC suggested *S. Jin* asking *R. Pail* and *X. Deng* from Sub-commission 2.5 to come up with a proposal to re-install an Altimetry Service and how to proceed (incl. call for participation, partners etc.).

*M. Hashimoto* gave a summary presentation about the mid-term report of **Commission 3**. *He* reported about the work of the five 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*), and the (Joint) Study/Working Groups during the reporting period 2015-2017. *He* suggested merging Sub-commission 3.2 with Sub-commission 3.5 to establish a new joint IAG-IAVCEI Sub-commission on Volcano Geodesy. *H. Drewes* noted that Sub-commission 3.2 has only little output and supported a re-

structuring. On 28 July 2017, there was a meeting with IASPEI about possible future collaboration. Similar meetings could be organized with IAVCEI and IACS during the IUGG Business Meetings in Montreal, Canada, in September 2017. *H. Schuh* noted that IAG has received a lot of positive response from IAVCEI concerning further collaboration. *M. Sideris* suggested re-structuring (i) Sub-commission 3.2 into an IAG-IAVCEI Inter-Association Activity on Volcano Geodesy, (ii) Sub-commission 3.4 into an IAG-IACS Inter-Association Activity on Cryospheric Deformation, and (iii) Sub-commission 3.5 into an IAG-IASPEI Inter-Association Activity on Tectonics and Earthquake Geodesy. The EC decided merging Sub-commission 3.2 with Sub-commission 3.5 under the name "Tectonics and Earthquake Geodesy". The EC further decided establishing a new Sub-commission 3.2 on Volcano Geodesy and recommended Commission 3 installing 1 to 3 Working Groups (with up to 20 members) for each Sub-commission.

*M. Santos* gave a summary presentation about the mid-term report of **Commission 4**. *He* reported about the work of the four Sub-commissions: 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. Wang*), Sub-commission 4.3 (Atmosphere Remote Sensing; chaired by *M. Schmidt*), and Sub-commission 4.4 (Multi-constellation GNSS; chaired by *P. Wielgosz*), and the (Joint) Study/Working Groups during the reporting period 2015-2017. *He* noted that SG 4.3.1 (Ionospheric and Atmospheric Coupling Processes and Phenomena: Modeling and Measurements) was not active and is to be dissolved. The EC approved the termination of SG 4.3.1. *M. Santos* then proposed to establish a Joint Working Group on modern GNSS using new GNSS signals (L5, L2C) for practical applications, and *he* presented preliminary Terms of Reference. The discussion resulted in the option to have it joint with Commission 3 and in close cooperation or merging with WG 4.4.1 (Biases in Multi-Signal Data Processing) and WG 4.4.2 (Integer Ambiguity Resolution for Multi-GNSS). It was recommended to name it JWG 4.4.1 "New GNSS Signals for Crustal Motion Studies". *J. Geng* was proposed as the chairperson. The EC recommended establishing a JWG 4.4.1 joint with Commission 3

*P. Novák* gave a summary presentation about the mid-term report of **ICCT**. *He* presented the major activities of all 13 study groups within ICCT during the reporting period 2015-2017 and gave an outlook for ICCT activities from 2017 to 2019. *He* noted that JSG 0.22 (Definition of next generation terrestrial reference frames) is to be dissolved due to missing output. The EC approved the termination of JSG 0.22. *P. Novák* further noted that the mid-term report from JSG 0.16 (Earth's inner structure from combined geodetic and geophysical sources) was weak and agreed (i) to submit a revised mid-term report, (ii) to appoint a Vice Chair and further study group members, and (iii) to deliver a good final report in 2019. *He* mentioned that the proposed dates for the next Hotine-Marussi Symposium are 18-22 June 2018, in Rome, Italy (instead of Assisi, Italy, as announced earlier).

## **5. IAG mid-term reports (Travaux de l'AIG) of GGOS and Services**

There was no presentation given for GGOS.

*R. Barzaghi* presented the major activities of the following Gravity Field Services during the reporting period 2015-2017: International Gravity Field Service (IGFS), International Gravimetric Bureau (BGI), International Service for the Geoid (ISG), International Geodynamics and Earth Tide Service (IGETS), International Center for Global Earth Models (ICGEM), and International DEM Service (IDEMS). Further, *he* presented the new IGFS website (<http://igfs.topo.auth.gr/>). *R. Barzaghi* also referred to the discussion on the

International Combination Service for Time-variable Gravity Field Solutions (COST-G) started at the previous EC meeting in Vienna, April 2017. *He* agreed explaining the difference between an IGFS Service and an IGFS Processing Center to *A. Jäggi*, Chair of the COST-G. An IGFS Processing Center should have a more experimental (evaluating and analyzing) character while an IGFS Service should be broader, fully developed and operational. Thus, the EC recommends starting with a Processing Center under IGFS.

There was no report on the geometry-oriented services.

*Axel Nothnagel* reported about the activities 2015-2017 of the following Services: International Earth Rotation and Reference Systems Service (IERS), International VLBI Service for Geodesy and Astrometry (IVS), Bureau International des Poids et Mesures (BIPM), Permanent Service of Mean Sea Level (PSMSL). The BIPM Time Department will get a new director because *E. F. Arias* will retire by the end of the year. A call for applications has been published.

## **6. International Combination Service for Time-variable Gravity Field Solutions (COST-G)**

This issue was presented by *R. Barzaghi* (c.f. Agenda Point 5) and discussed there.

## **7. Report of the COB**

*H. Drewes* presented a report provided by *J. Adam*.

## **8. Reports of Members-at-Large**

There were no presentations given by the Members-at-Large.

## **9. Report of the Journal of Geodesy Editor-in-Chief**

On behalf of *J. Kusche*, *H. Drewes* presented the report of the Journal of Geodesy Editor-in-Chief. *He* suggested adding more Assistant Editors in the area of gravity and GNSS, and accepting fewer papers. The majority of EC members endorsed a larger number of AEs, but was not in favor of rejecting more papers, because the rejection rate is already very high. There was a general agreement to accept more papers from practice, as theory is dominating at present.

## **10. Status of the GGOS Chair appointment**

*H. Schuh* mentioned that, as of 29 July 2017, *R. Gross* was elected as the new GGOS Chair and will start his duties on 1 August 2017.

## **11. Report from IUGG**

There was no presentation given for IUGG.

## **12. Nomination Committee for IAG officers 2019-2023**

According to the IAG Bylaws, the IAG President, after taking advice from the EC, appoints a Nomination Committee for the election of the IAG Officers for the upcoming period by the

IAG Council. The Committee consists of a Chair and three other members. *H. Schuh* proposed to follow the tradition that the immediate Past President be the Chair of the Committee. The EC agreed, and *H. Schuh* appointed *C. Rizos* as the Chair of the Nomination Committee for the IAG officers of the period 2019-2023. *He* asked the EC to propose candidates for the other members, preferably from different continents. *He* will then appoint three of them.

### **13. Status of the IAG Strategy discussion**

The EC discussed the status of the IAG Strategy discussion and a proposal received from the Chinese National Committee for International Association of Geodesy (CNC-IAG) on 18 June 2017. The EC agreed aiming for a better regional balance of EC members. At present, 8 EC members come from Europe, 4 from North America, 1 each for Asia, Australia, Africa, and South America. There was a dedicated EC meeting on the IAG Strategy four days later on August 3, 2017.

### **14. Upcoming IAG meetings and sponsorship**

*H. Drewes* presented the updated list of upcoming IAG meetings, which can be downloaded in its respective status from the IAG Office homepage (<https://iag.dgfi.tum.de/en/meetings-calendar/>).

### **15. Any other business**

The EC decided to hold its next meeting on the occasion of the EGU General Assembly 2018 in Vienna, Austria.

### **16. Visit of the IAG-IASPEI Scientific Assembly venue**

#### **Adjourn**

*H. Schuh* thanked the participants for their contributions and closed the session at 18:00.

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